Full wwPDB X-ray Structure Validation Report ⓘ

Jul 30, 2024 – 01:46 AM EDT

PDB ID	:	8VTW
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with macrolone MCX-128 and protein Y at 2.35A resolution
Authors	:	Aleksandrova, E.V.; Ma, C.-X.; Klepacki, D.; Alizadeh, F.; Vazquez-Laslop, N.; Liang, J.-H.; Polikanov, Y.S.; Mankin, A.S.
Deposited on	:	2024-01-27
Resolution	:	2.35 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

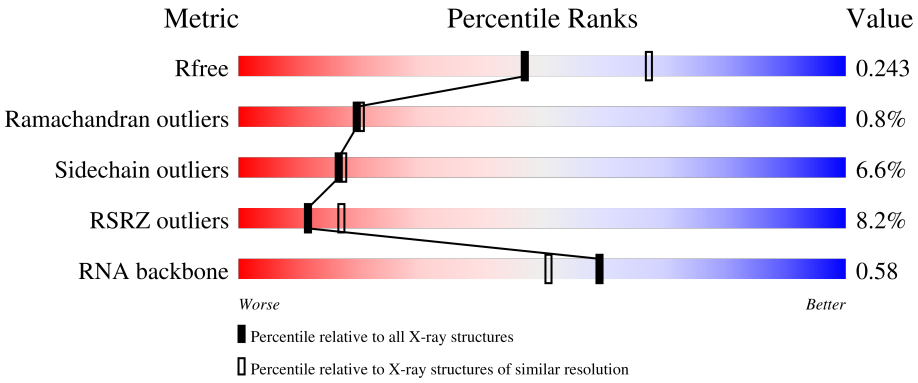
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.37.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.37.1

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.35 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1164 (2.36-2.36)
Ramachandran outliers	138981	1211 (2.36-2.36)
Sidechain outliers	138945	1212 (2.36-2.36)
RSRZ outliers	127900	1150 (2.36-2.36)
RNA backbone	3102	1006 (2.74-1.98)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1A	2915	5% 83% 15%
1	2A	2915	5% 82% 16%
2	1B	121	% 91% 8%
2	2B	121	% 88% 11%

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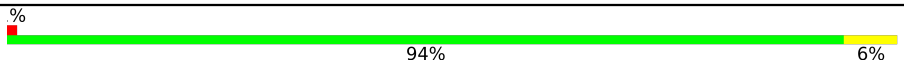
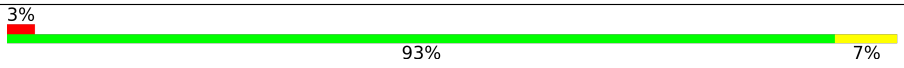
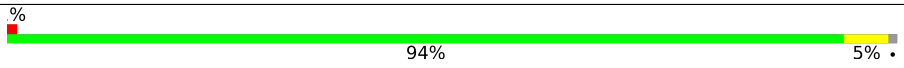
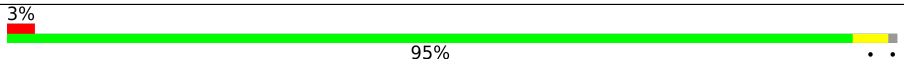
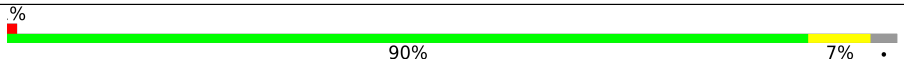
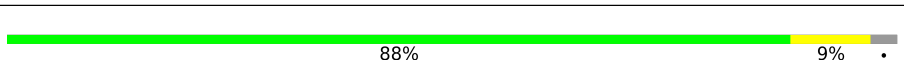
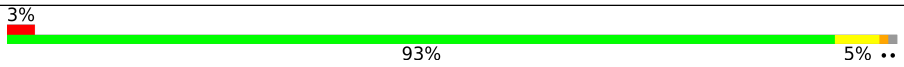
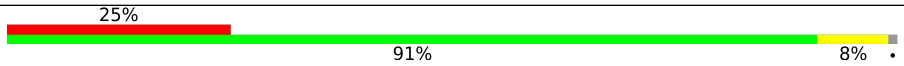
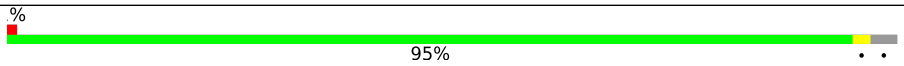
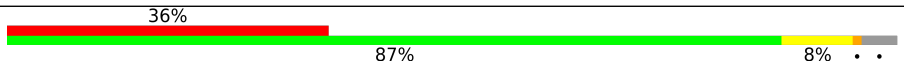
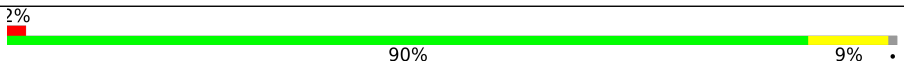
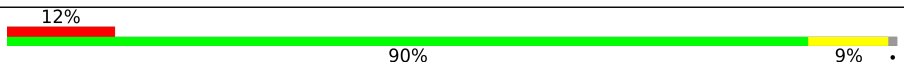
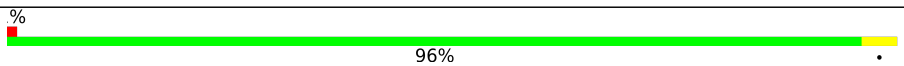
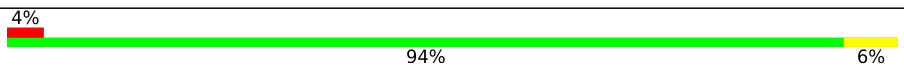
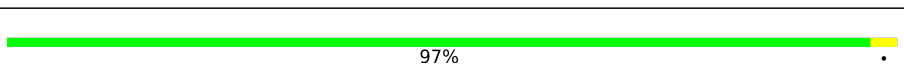
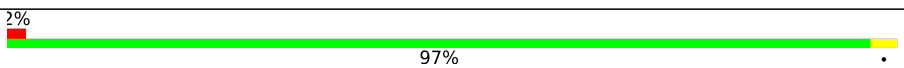
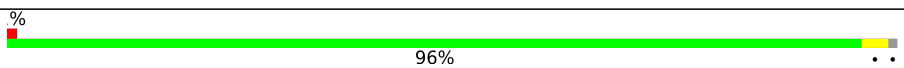
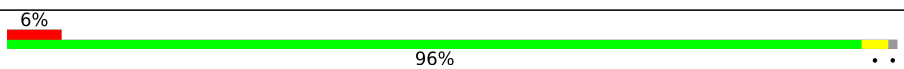
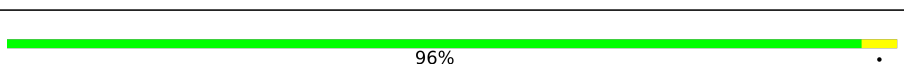
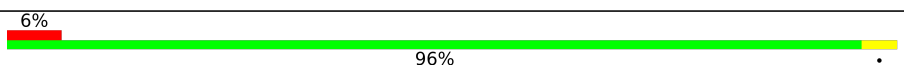
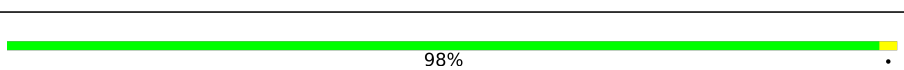
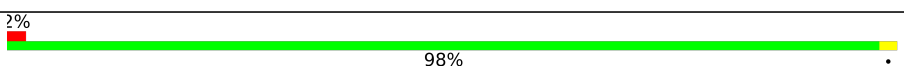
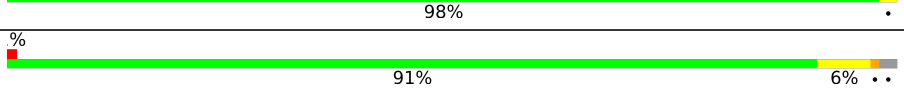
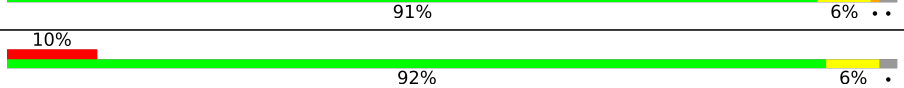
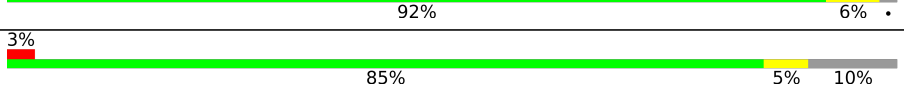
Mol	Chain	Length	Quality of chain
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	
15	1T	146	

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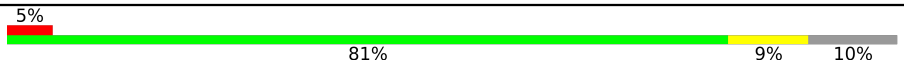
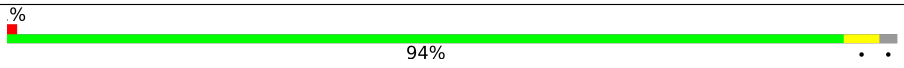
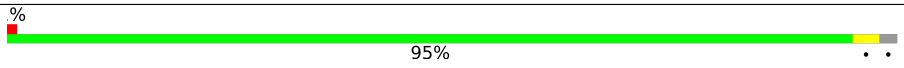
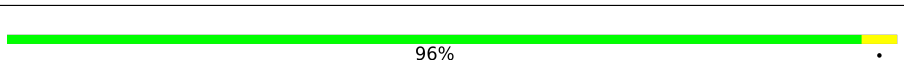
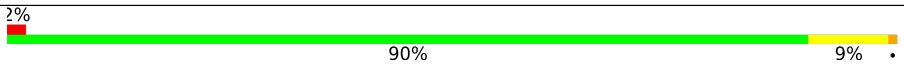
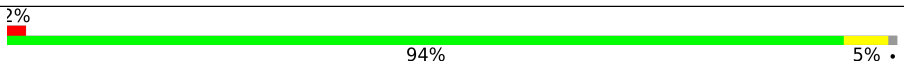
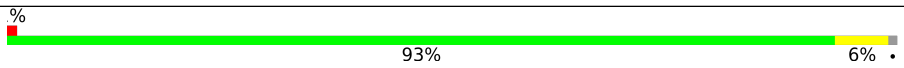
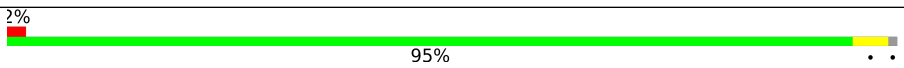
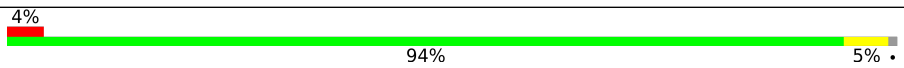
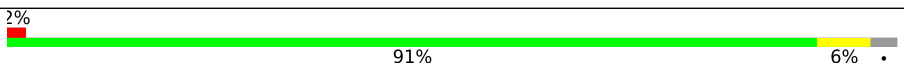
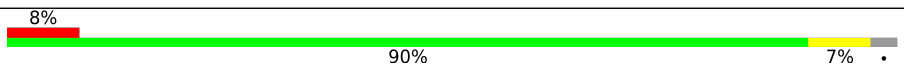
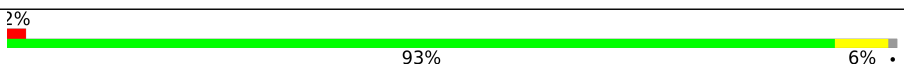
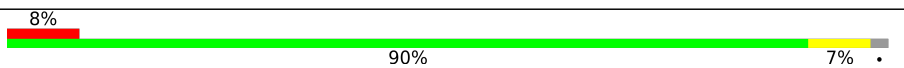
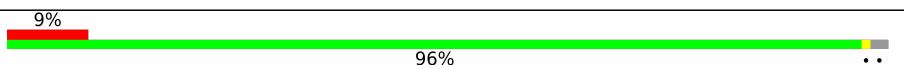
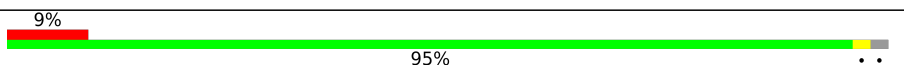
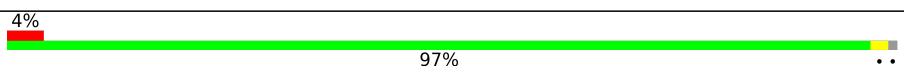
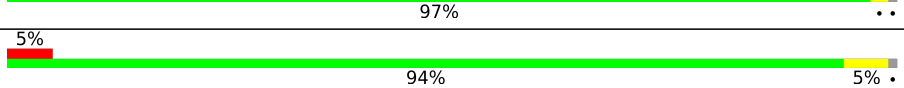
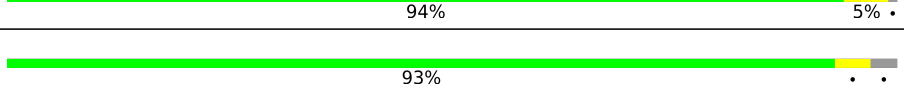
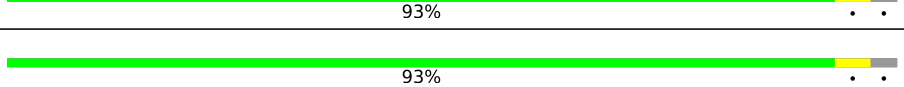
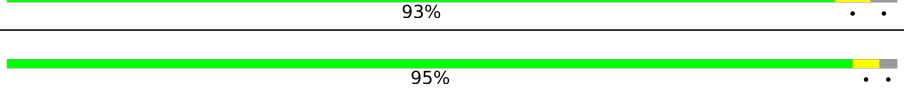
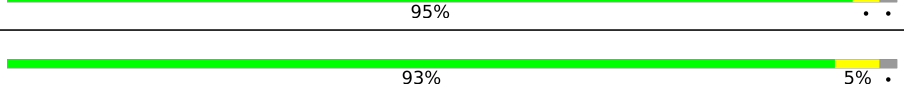
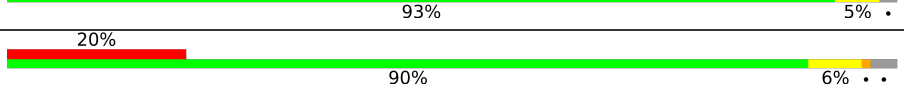
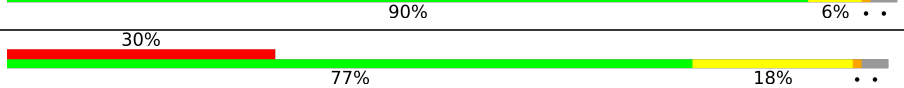
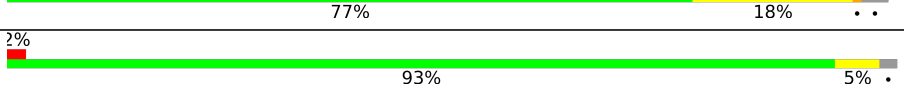
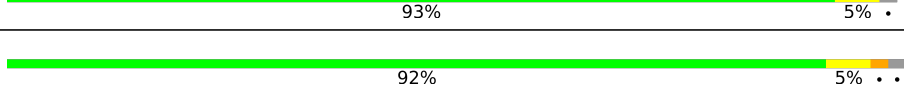
Mol	Chain	Length	Quality of chain
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	
27	25	60	

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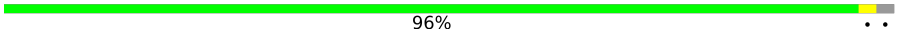
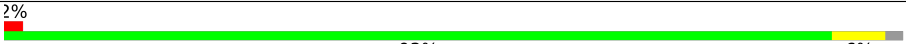
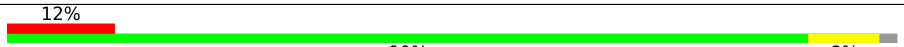
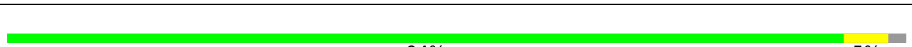
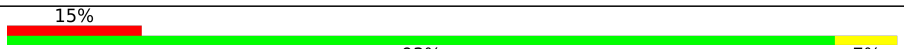
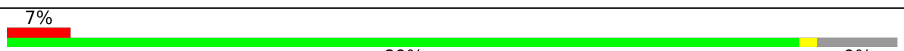
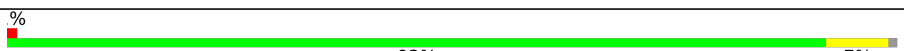
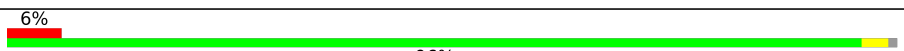
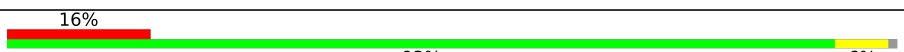
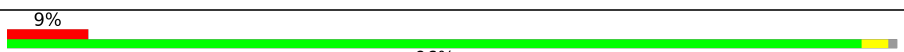
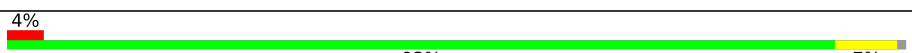
Mol	Chain	Length	Quality of chain
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	

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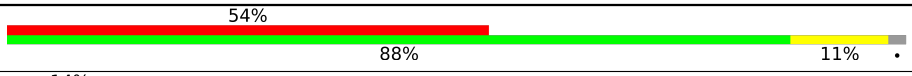
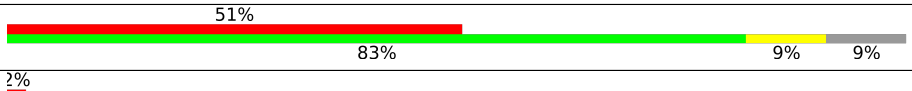
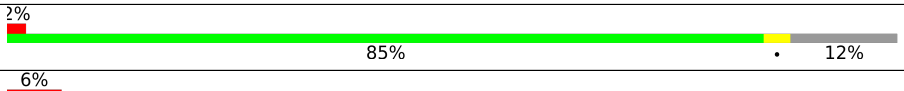
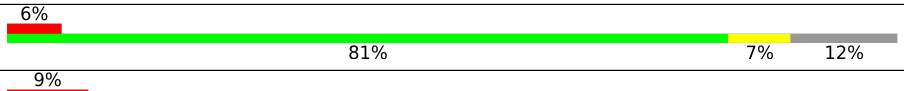
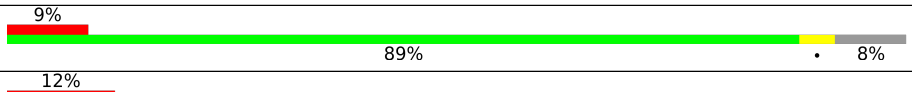
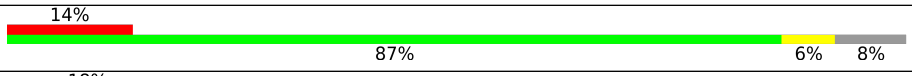
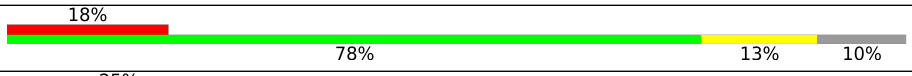
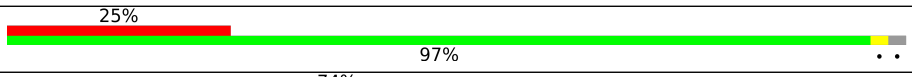
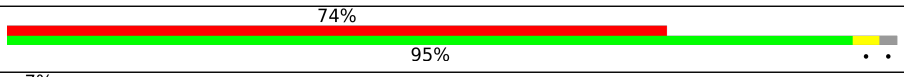
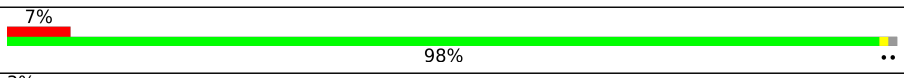
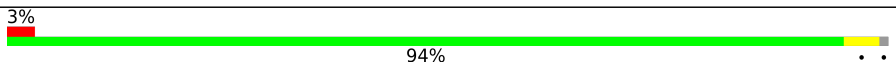
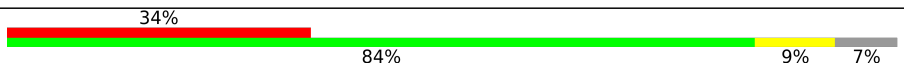
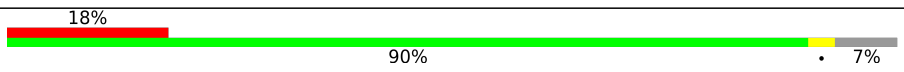
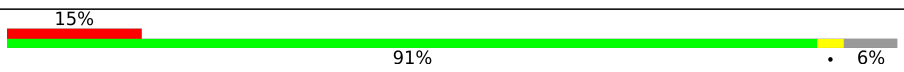
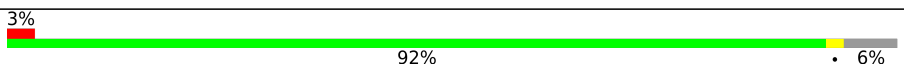
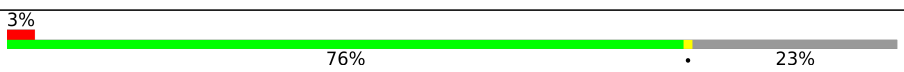
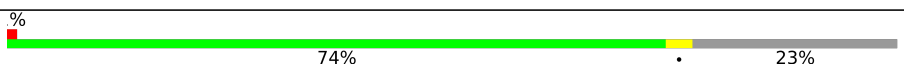
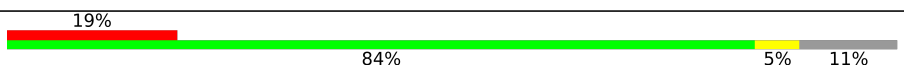
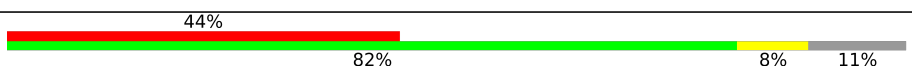
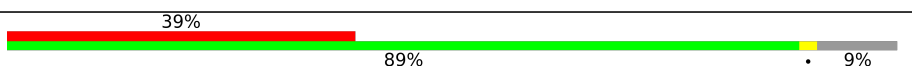
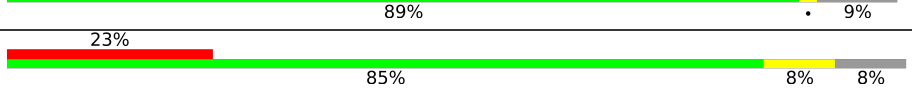
Mol	Chain	Length	Quality of chain
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	

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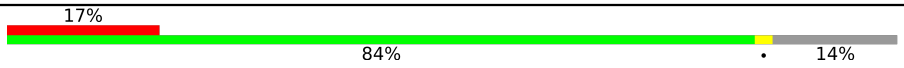
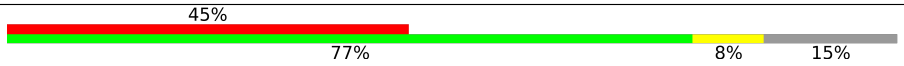
Mol	Chain	Length	Quality of chain
53	1y	113	
53	2y	113	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	MG	1A	3680	-	-	-	X
54	MG	1A	3937	-	-	-	X
54	MG	1A	3979	-	-	-	X
54	MG	1a	1663	-	-	-	X
54	MG	1a	1825	-	-	-	X

2 Entry composition (i)

There are 60 unique types of molecules in this entry. The entry contains 296775 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2131	1346	422	360	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1426	916	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1424	912	259	249	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	173	Total	C	N	O	S	0	0	0
			1324	842	247	234	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	147	Total	C	N	O	S	0	0	0
			1094	699	191	203	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1076	687	186	202	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1121	722	208	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0
11	2P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
12	2Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0
13	2R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total 877	C 553	N 175	O 149	0	0	0
14	2S	110	Total 870	C 549	N 173	O 148	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total 1091	C 680	N 225	O 185	S 1	0	0	0
15	2T	131	Total 1083	C 675	N 224	O 183	S 1	0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			775	498	141	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			810	520	153	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			810	519	153	132	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	203	Total	C	N	O	S	0	0	0
			1587	1011	282	292	2			
21	2Z	201	Total	C	N	O	S	0	0	0
			1557	995	274	286	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			650	401	139	109	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			592	368	119	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			546	346	96	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1842	1175	330	332	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1558	979	305	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			814	516	144	151	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1098	694	210	192	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			834	520	156	155	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O	0	0	0
			555	355	108	92			
49	2r	68	Total	C	N	O	0	0	0
			555	355	108	92			

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O	0	0	0
			199	122	48	29			
52	2u	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 53 is a protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1y	97	Total 764	C 478	N 144	O 139	S 3	0	0	0
53	2y	96	Total 749	C 468	N 141	O 137	S 3	0	0	0

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	996	Total 996	Mg 996	0	0
54	1B	31	Total 31	Mg 31	0	0
54	1D	16	Total 16	Mg 16	0	0
54	1E	11	Total 11	Mg 11	0	0
54	1F	17	Total 17	Mg 17	0	0
54	1G	4	Total 4	Mg 4	0	0
54	1H	2	Total 2	Mg 2	0	0
54	1N	4	Total 4	Mg 4	0	0
54	1O	1	Total 1	Mg 1	0	0
54	1P	4	Total 4	Mg 4	0	0
54	1Q	4	Total 4	Mg 4	0	0
54	1R	5	Total 5	Mg 5	0	0
54	1T	6	Total 6	Mg 6	0	0
54	1U	5	Total 5	Mg 5	0	0
54	1V	6	Total 6	Mg 6	0	0
54	1W	5	Total 5	Mg 5	0	0
54	1X	1	Total 1	Mg 1	0	0
54	1Y	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1Z	1	Total Mg 1 1	0	0
54	10	9	Total Mg 9 9	0	0
54	11	5	Total Mg 5 5	0	0
54	12	1	Total Mg 1 1	0	0
54	13	3	Total Mg 3 3	0	0
54	15	9	Total Mg 9 9	0	0
54	17	5	Total Mg 5 5	0	0
54	18	2	Total Mg 2 2	0	0
54	19	2	Total Mg 2 2	0	0
54	1a	267	Total Mg 267 267	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	5	Total Mg 5 5	0	0
54	1e	2	Total Mg 2 2	0	0
54	1f	1	Total Mg 1 1	0	0
54	1g	2	Total Mg 2 2	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1m	1	Total Mg 1 1	0	0
54	1n	3	Total Mg 3 3	0	0
54	1o	2	Total Mg 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1r	1	Total Mg 1 1	0	0
54	1t	2	Total Mg 2 2	0	0
54	1y	2	Total Mg 2 2	0	0
54	2A	726	Total Mg 726 726	0	0
54	2B	18	Total Mg 18 18	0	0
54	2D	12	Total Mg 12 12	0	0
54	2E	7	Total Mg 7 7	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	1	Total Mg 1 1	0	0
54	2I	1	Total Mg 1 1	0	0
54	2N	1	Total Mg 1 1	0	0
54	2O	1	Total Mg 1 1	0	0
54	2P	2	Total Mg 2 2	0	0
54	2Q	2	Total Mg 2 2	0	0
54	2R	2	Total Mg 2 2	0	0
54	2T	4	Total Mg 4 4	0	0
54	2V	3	Total Mg 3 3	0	0
54	2W	2	Total Mg 2 2	0	0
54	20	3	Total Mg 3 3	0	0
54	23	1	Total Mg 1 1	0	0
54	25	1	Total Mg 1 1	0	0

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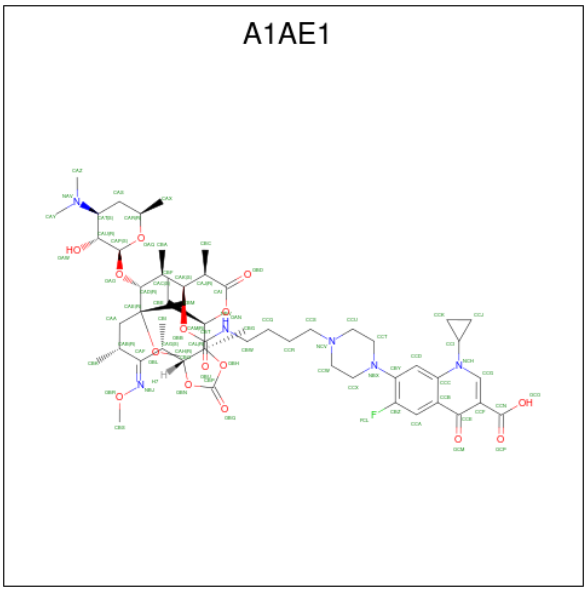
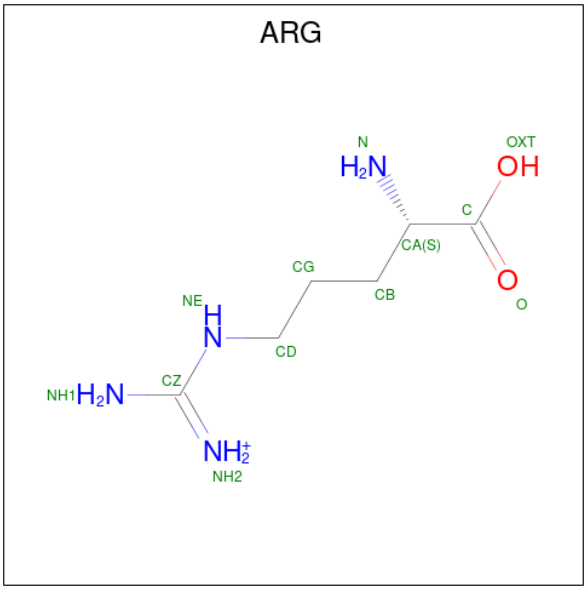
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	27	3	Total Mg 3 3	0	0
54	28	1	Total Mg 1 1	0	0
54	2a	181	Total Mg 181 181	0	0
54	2e	1	Total Mg 1 1	0	0
54	2f	2	Total Mg 2 2	0	0
54	2h	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2p	1	Total Mg 1 1	0	0
54	2r	1	Total Mg 1 1	0	0
54	2t	1	Total Mg 1 1	0	0

- Molecule 55 is 1-cyclopropyl-7-(4-{4-[({[(3aR,4R,7R,8S,9S,10R,11R,13R,14E,15S,15aR)-10-{[(2S,3R,4S,6R)-4-(dimethylamino)-3-hydroxy-6-methyloxan-2-yl]oxy}-4-ethyl-11-methoxy-14-(methoxyimino)-3a,7,9,11,13,15-hexamethyl-2,6-dioxododecahydro-2H,4H-[1,3]dioxolo[4,5-c]oxacyclotetradecin-8-yl]oxy}carbonyl)amino]butyl}piperazin-1-yl)-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (non-preferred name) (three-letter code: A1AE1) (formula: $C_{54}H_{81}FN_6O_{15}$) (labeled as "Ligand of Interest" by depositor).



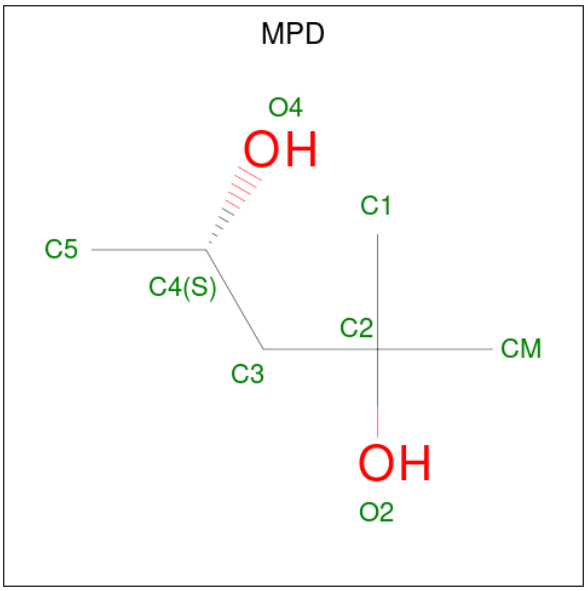
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
55	1A	1	Total	C	F	N	O	0	0
			76	54	1	6	15		
55	2A	1	Total	C	F	N	O	0	0
			76	54	1	6	15		

- Molecule 56 is ARGININE (three-letter code: ARG) (formula: $C_6H_{15}N_4O_2$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
56	1A	1	Total	C	N	O	0	0
			12	6	4	2		
56	1B	1	Total	C	N	O	0	0
			12	6	4	2		

- Molecule 57 is (4S)-2-METHYL-2,4-PENTANEDIOL (three-letter code: MPD) (formula: $C_6H_{14}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1A	1	Total C O 8 6 2	0	0
57	1T	1	Total C O 8 6 2	0	0
57	18	1	Total C O 8 6 2	0	0
57	1a	1	Total C O 8 6 2	0	0
57	2A	1	Total C O 8 6 2	0	0
57	2B	1	Total C O 8 6 2	0	0

- Molecule 58 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1Y	1	Total Zn 1 1	0	0
58	14	1	Total Zn 1 1	0	0
58	15	1	Total Zn 1 1	0	0
58	16	1	Total Zn 1 1	0	0
58	19	1	Total Zn 1 1	0	0
58	1n	1	Total Zn 1 1	0	0

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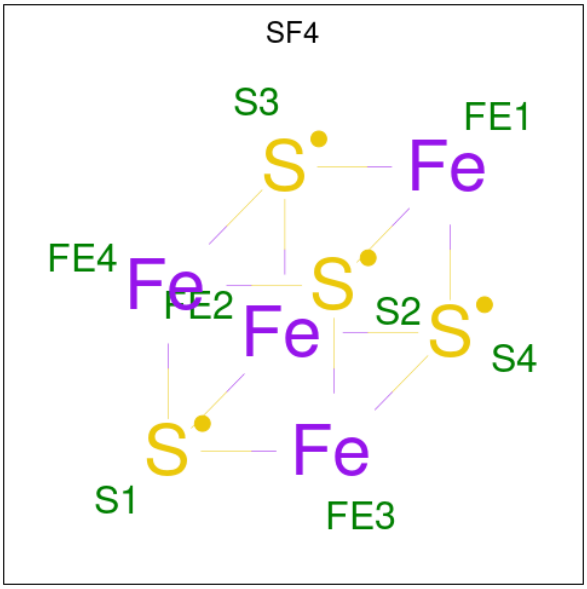
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	2Y	1	Total Zn 1 1	0	0
58	24	1	Total Zn 1 1	0	0
58	25	1	Total Zn 1 1	0	0
58	26	1	Total Zn 1 1	0	0
58	29	1	Total Zn 1 1	0	0
58	2n	1	Total Zn 1 1	0	0

- Molecule 59 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1d	1	Total Fe S 8 4 4	0	0
59	2d	1	Total Fe S 8 4 4	0	0

- Molecule 60 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1A	3773	Total O 3773 3773	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1B	85	Total O 85 85	0	0
60	1D	105	Total O 105 105	0	0
60	1E	67	Total O 67 67	0	0
60	1F	60	Total O 60 60	0	0
60	1G	13	Total O 13 13	0	0
60	1H	10	Total O 10 10	0	0
60	1I	3	Total O 3 3	0	0
60	1N	46	Total O 46 46	0	0
60	1O	26	Total O 26 26	0	0
60	1P	61	Total O 61 61	0	0
60	1Q	38	Total O 38 38	0	0
60	1R	33	Total O 33 33	0	0
60	1S	11	Total O 11 11	0	0
60	1T	29	Total O 29 29	0	0
60	1U	45	Total O 45 45	0	0
60	1V	30	Total O 30 30	0	0
60	1W	27	Total O 27 27	0	0
60	1X	23	Total O 23 23	0	0
60	1Y	14	Total O 14 14	0	0
60	1Z	8	Total O 8 8	0	0
60	10	22	Total O 22 22	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	11	26	Total O 26 26	0	0
60	12	9	Total O 9 9	0	0
60	13	22	Total O 22 22	0	0
60	14	1	Total O 1 1	0	0
60	15	25	Total O 25 25	0	0
60	16	16	Total O 16 16	0	0
60	17	19	Total O 19 19	0	0
60	18	27	Total O 27 27	0	0
60	19	4	Total O 4 4	0	0
60	1a	446	Total O 446 446	0	0
60	1b	1	Total O 1 1	0	0
60	1c	1	Total O 1 1	0	0
60	1d	6	Total O 6 6	0	0
60	1e	5	Total O 5 5	0	0
60	1f	1	Total O 1 1	0	0
60	1g	3	Total O 3 3	0	0
60	1h	4	Total O 4 4	0	0
60	1j	2	Total O 2 2	0	0
60	1l	2	Total O 2 2	0	0
60	1n	1	Total O 1 1	0	0
60	1o	4	Total O 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1p	1	Total O 1 1	0	0
60	1y	2	Total O 2 2	0	0
60	2A	1939	Total O 1939 1939	0	0
60	2B	31	Total O 31 31	0	0
60	2D	45	Total O 45 45	0	0
60	2E	23	Total O 23 23	0	0
60	2F	16	Total O 16 16	0	0
60	2G	2	Total O 2 2	0	0
60	2I	1	Total O 1 1	0	0
60	2N	3	Total O 3 3	0	0
60	2O	14	Total O 14 14	0	0
60	2P	24	Total O 24 24	0	0
60	2Q	7	Total O 7 7	0	0
60	2R	14	Total O 14 14	0	0
60	2S	1	Total O 1 1	0	0
60	2T	7	Total O 7 7	0	0
60	2U	12	Total O 12 12	0	0
60	2V	3	Total O 3 3	0	0
60	2W	15	Total O 15 15	0	0
60	2X	8	Total O 8 8	0	0
60	2Z	3	Total O 3 3	0	0

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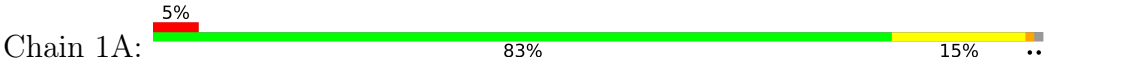
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	20	7	Total O 7 7	0	0
60	21	9	Total O 9 9	0	0
60	23	2	Total O 2 2	0	0
60	25	6	Total O 6 6	0	0
60	26	5	Total O 5 5	0	0
60	27	3	Total O 3 3	0	0
60	28	9	Total O 9 9	0	0
60	2a	259	Total O 259 259	0	0
60	2e	2	Total O 2 2	0	0
60	2l	3	Total O 3 3	0	0
60	2n	1	Total O 1 1	0	0
60	2o	2	Total O 2 2	0	0
60	2p	1	Total O 1 1	0	0
60	2r	4	Total O 4 4	0	0
60	2t	3	Total O 3 3	0	0

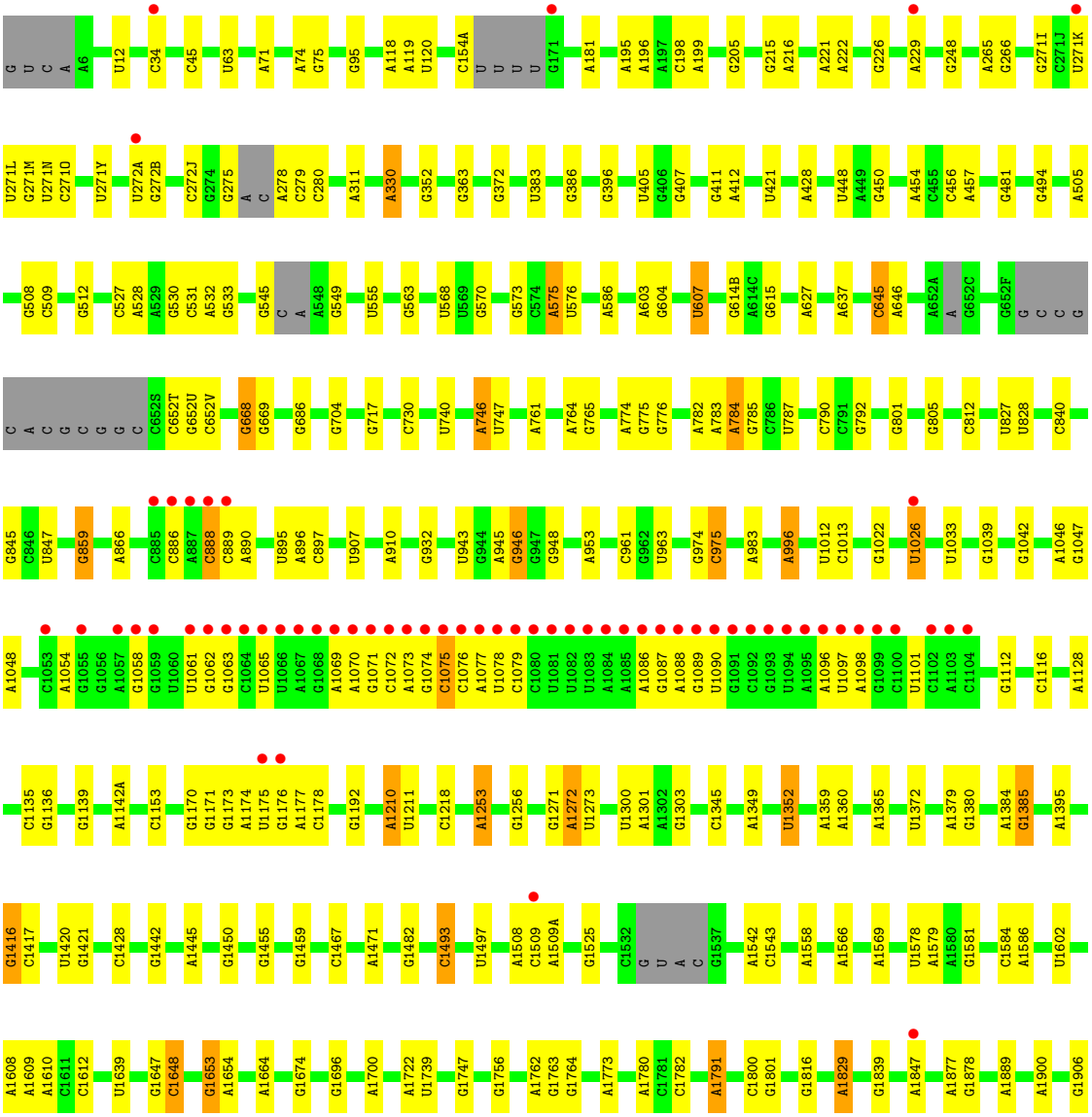
3 Residue-property plots (i)

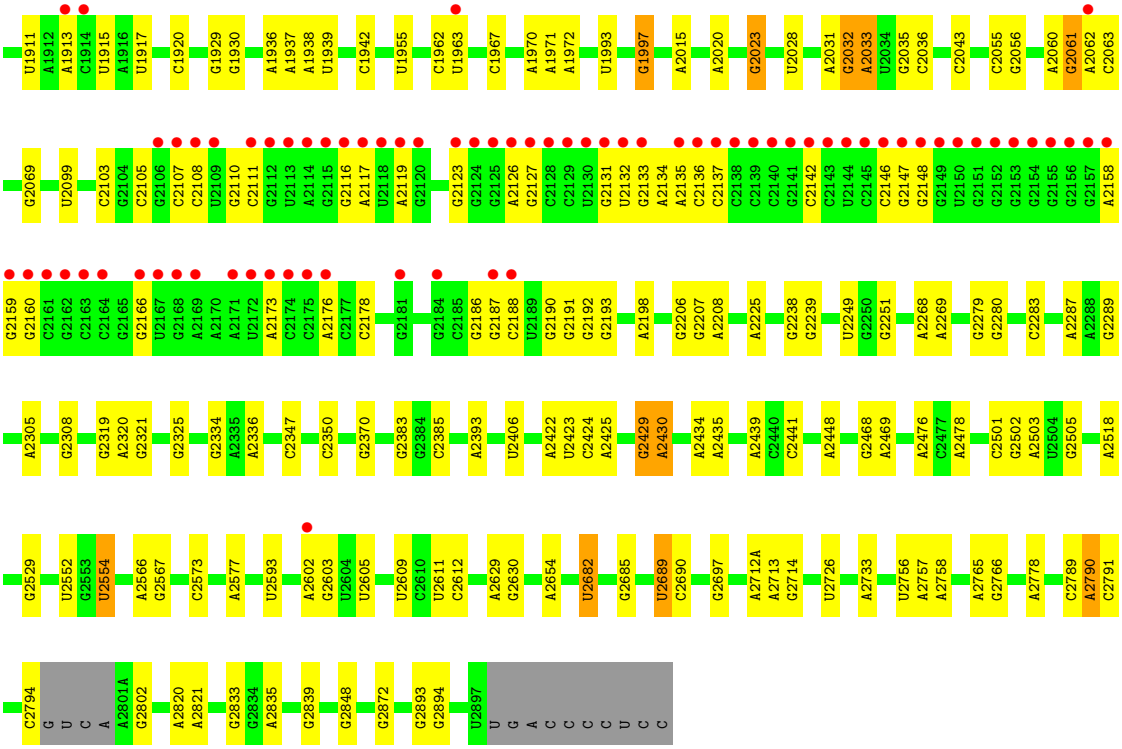
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: 23S Ribosomal RNA

Chain 1A:

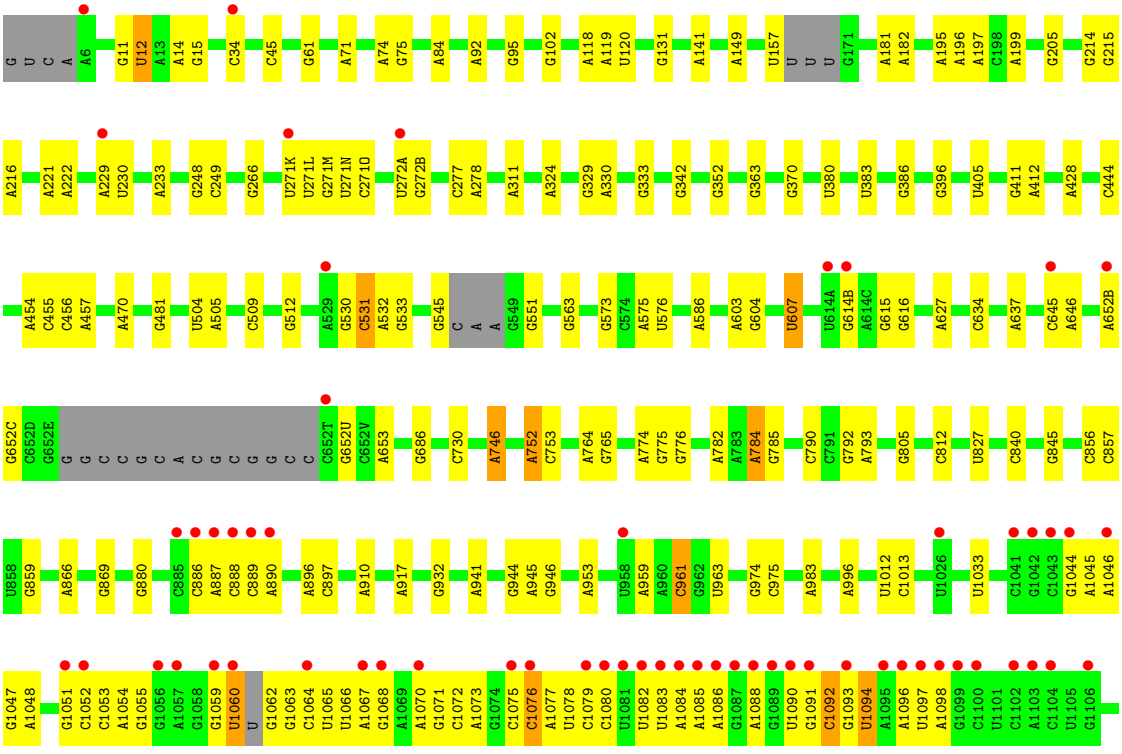


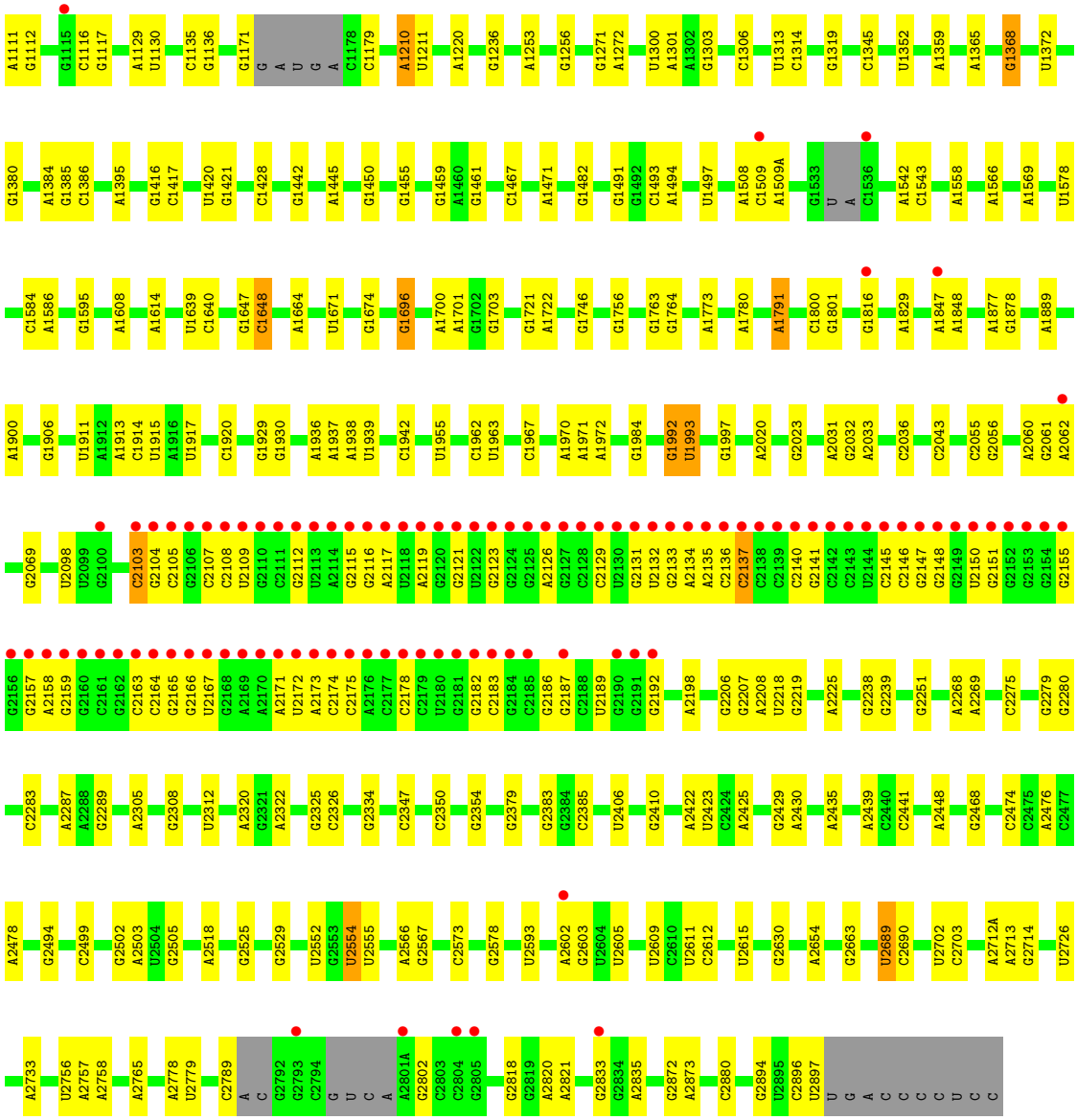




• Molecule 1: 23S Ribosomal RNA

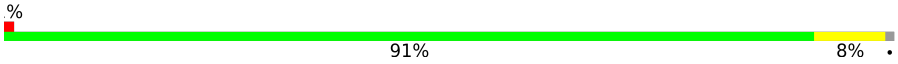
Chain 2A:

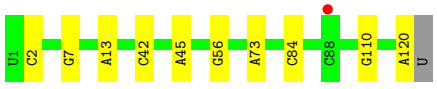




• Molecule 2: 5S Ribosomal RNA

Chain 1B:



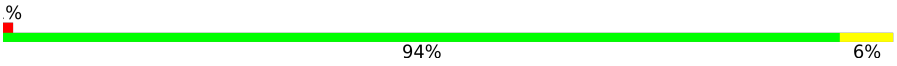


• Molecule 2: 5S Ribosomal RNA

Chain 2B:

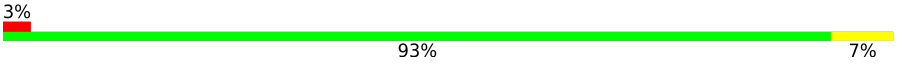
• Molecule 3: 50S ribosomal protein L2

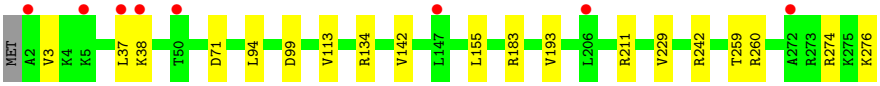
Chain 1D:



• Molecule 3: 50S ribosomal protein L2

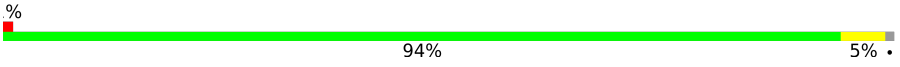
Chain 2D:





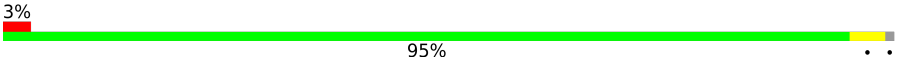
• Molecule 4: 50S ribosomal protein L3

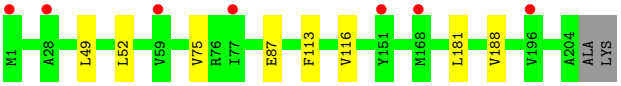
Chain 1E:



• Molecule 4: 50S ribosomal protein L3

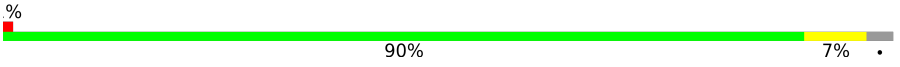
Chain 2E:

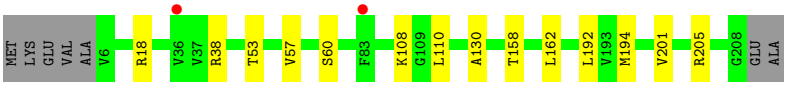




• Molecule 5: 50S ribosomal protein L4

Chain 1F:



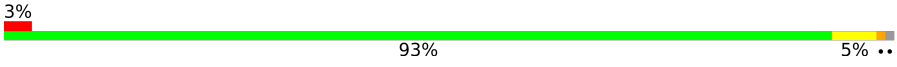


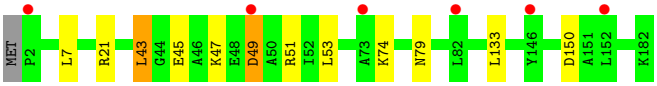
• Molecule 5: 50S ribosomal protein L4

Chain 2F:

• Molecule 6: 50S ribosomal protein L5

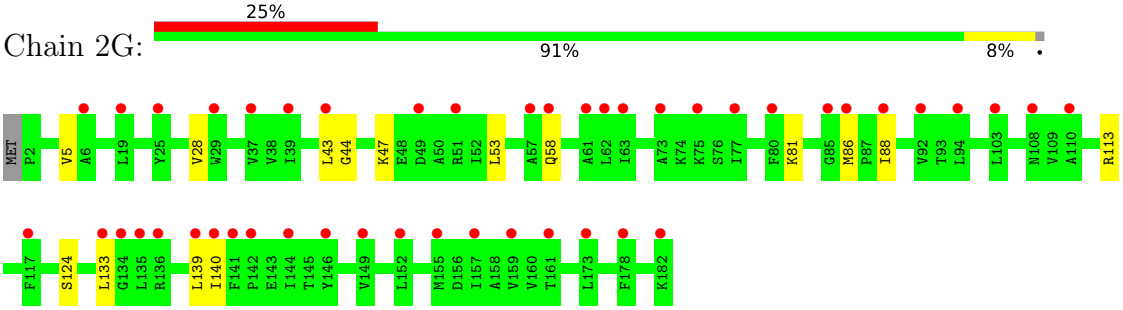
Chain 1G:





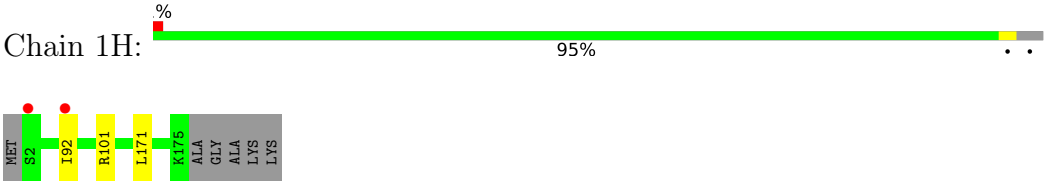
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



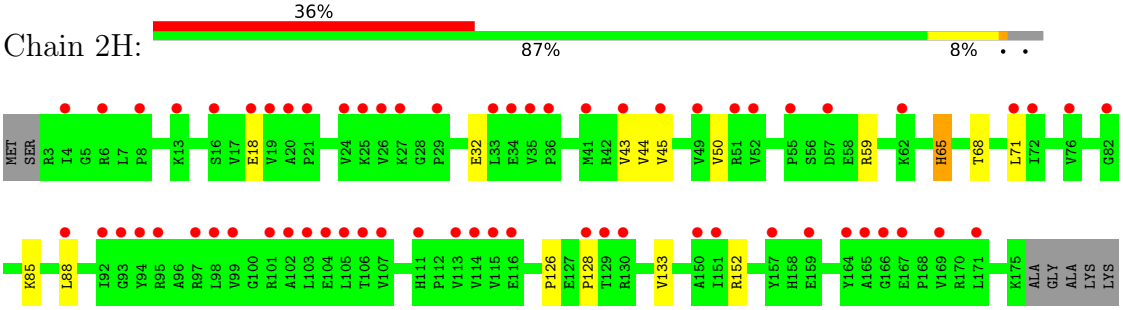
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



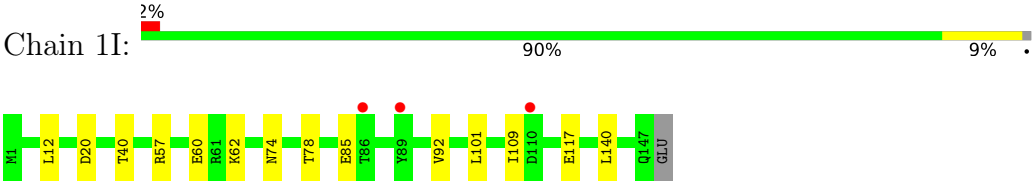
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



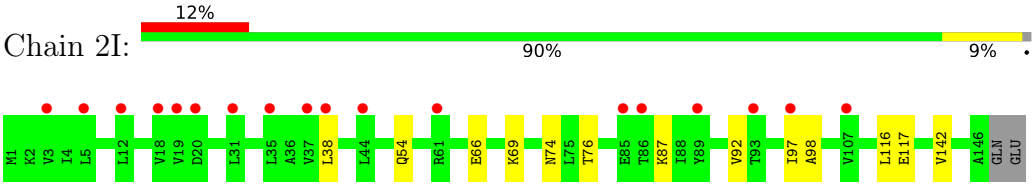
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



• Molecule 8: 50S ribosomal protein L9

Chain 2I:

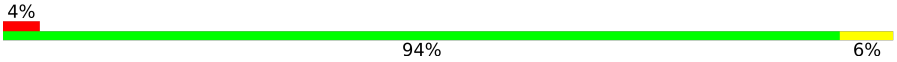


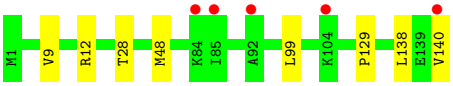
• Molecule 9: 50S ribosomal protein L13

Chain 1N:

• Molecule 9: 50S ribosomal protein L13

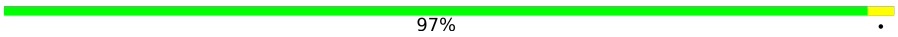
Chain 2N:





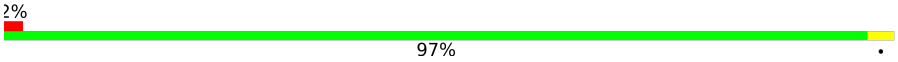
• Molecule 10: 50S ribosomal protein L14

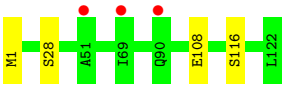
Chain 1O:



• Molecule 10: 50S ribosomal protein L14

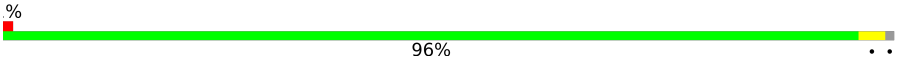
Chain 2O:

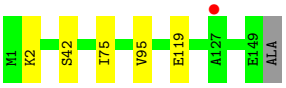




• Molecule 11: 50S ribosomal protein L15

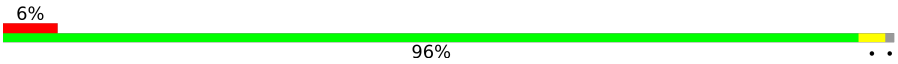
Chain 1P:

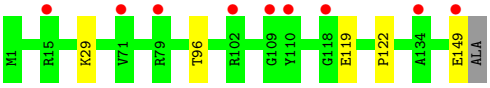




• Molecule 11: 50S ribosomal protein L15

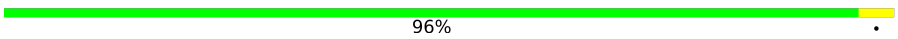
Chain 2P:





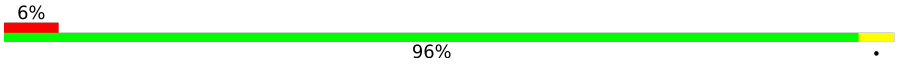
• Molecule 12: 50S ribosomal protein L16

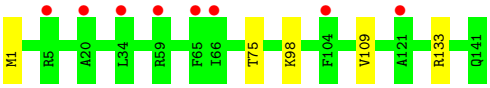
Chain 1Q:



• Molecule 12: 50S ribosomal protein L16

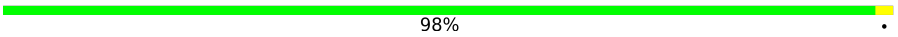
Chain 2Q:





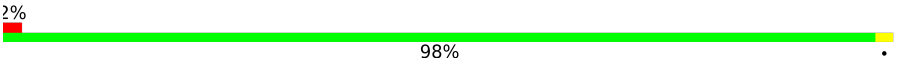
• Molecule 13: 50S ribosomal protein L17

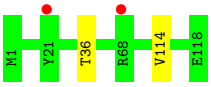
Chain 1R:



• Molecule 13: 50S ribosomal protein L17

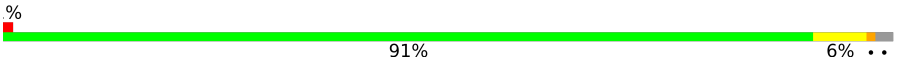
Chain 2R:

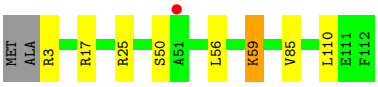




• Molecule 14: 50S ribosomal protein L18

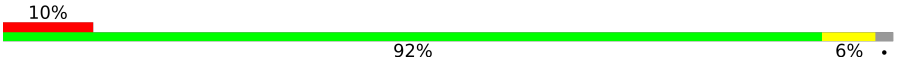
Chain 1S:

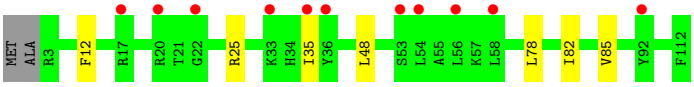




• Molecule 14: 50S ribosomal protein L18

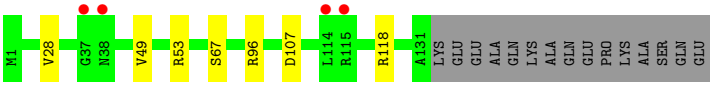
Chain 2S:





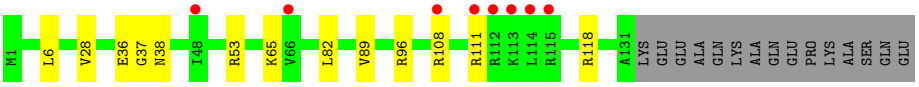
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



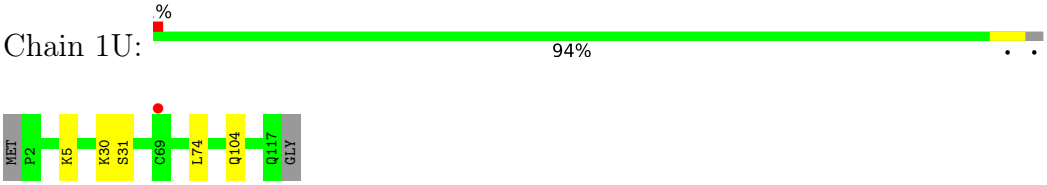
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



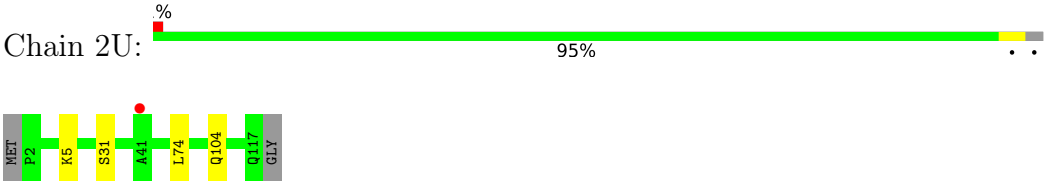
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



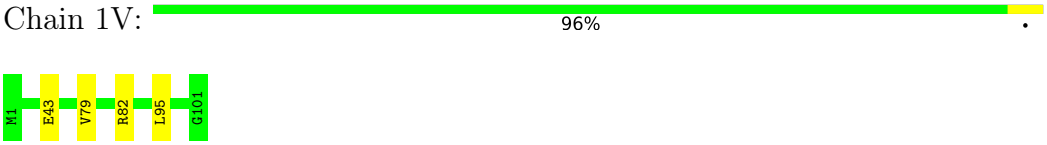
• Molecule 16: 50S ribosomal protein L20

Chain 2U:



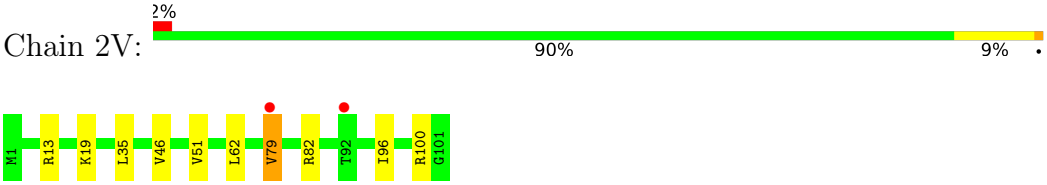
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



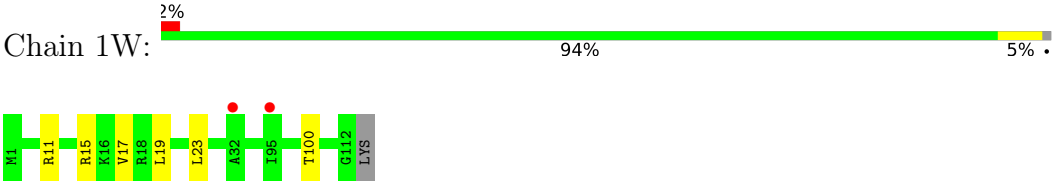
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



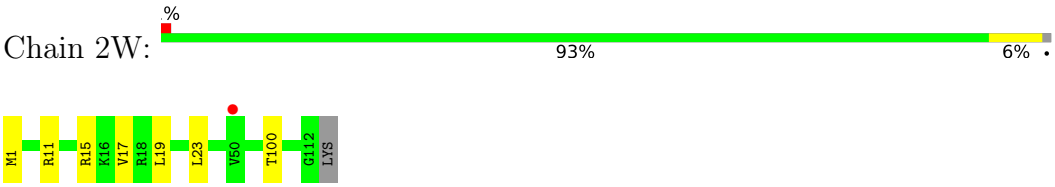
• Molecule 18: 50S ribosomal protein L22

Chain 1W:



• Molecule 18: 50S ribosomal protein L22

Chain 2W:

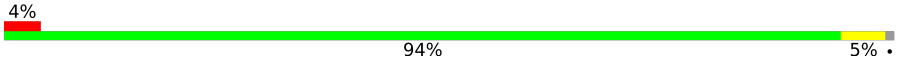


• Molecule 19: 50S ribosomal protein L23

Chain 1X:

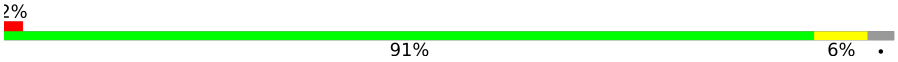
• Molecule 19: 50S ribosomal protein L23

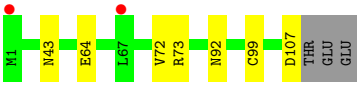
Chain 2X:



• Molecule 20: 50S ribosomal protein L24

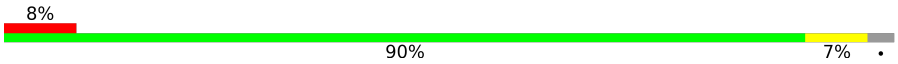
Chain 1Y:

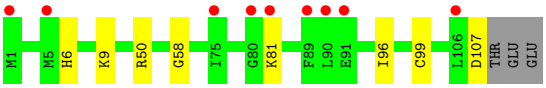




• Molecule 20: 50S ribosomal protein L24

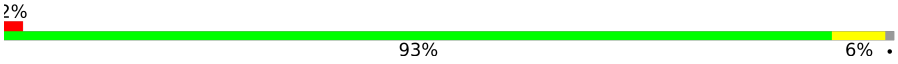
Chain 2Y:





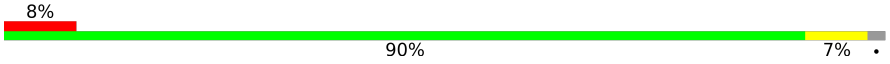
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



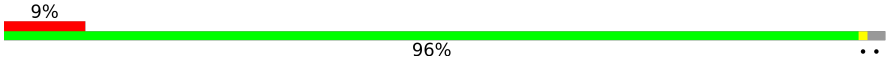
• Molecule 21: 50S ribosomal protein L25

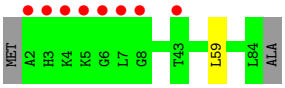
Chain 2Z:



• Molecule 22: 50S ribosomal protein L27

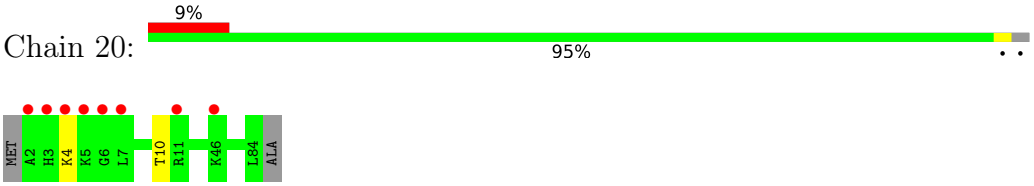
Chain 10:





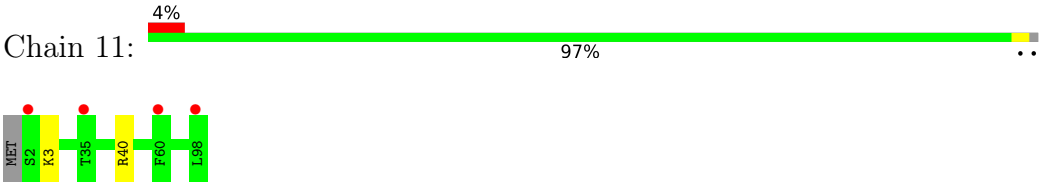
• Molecule 22: 50S ribosomal protein L27

Chain 20:



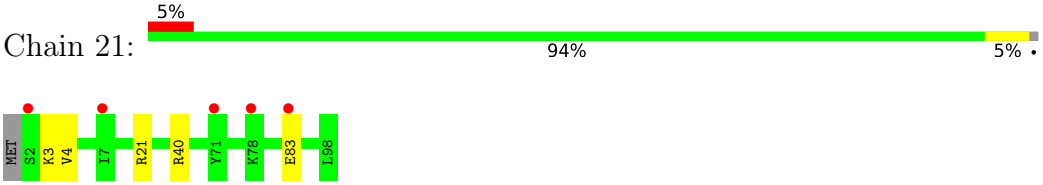
• Molecule 23: 50S ribosomal protein L28

Chain 11:



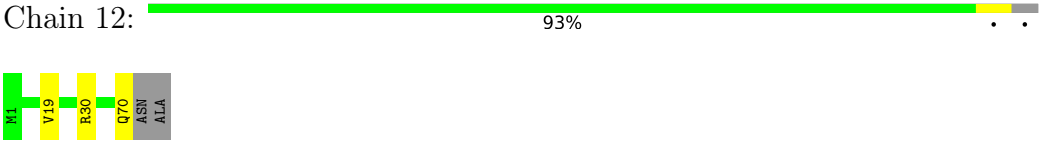
• Molecule 23: 50S ribosomal protein L28

Chain 21:



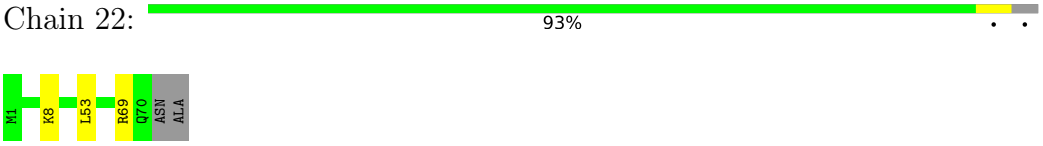
• Molecule 24: 50S ribosomal protein L29

Chain 12:



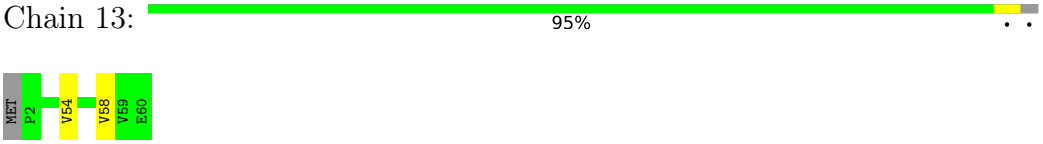
• Molecule 24: 50S ribosomal protein L29

Chain 22:



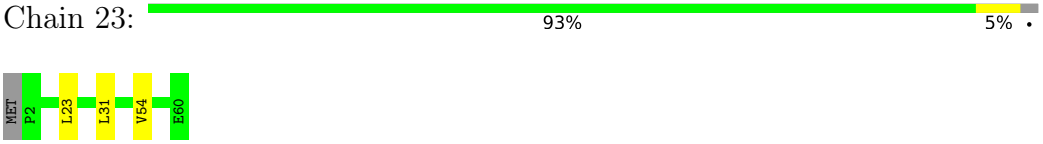
• Molecule 25: 50S ribosomal protein L30

Chain 13:



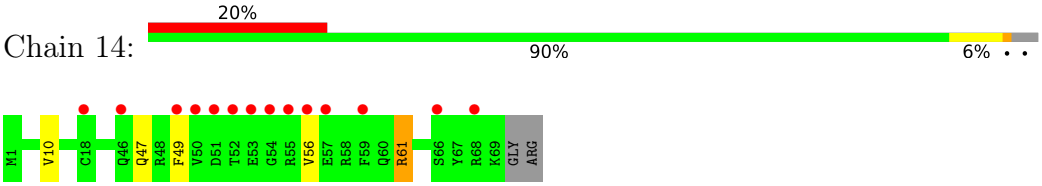
• Molecule 25: 50S ribosomal protein L30

Chain 23:



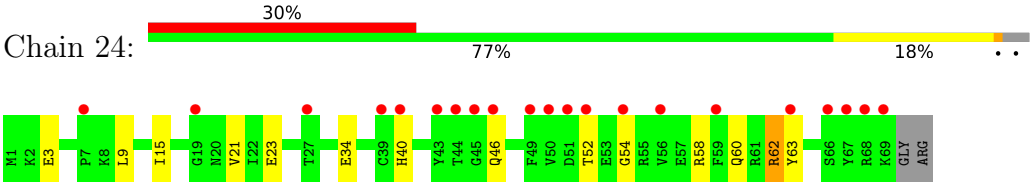
• Molecule 26: 50S ribosomal protein L31

Chain 14:



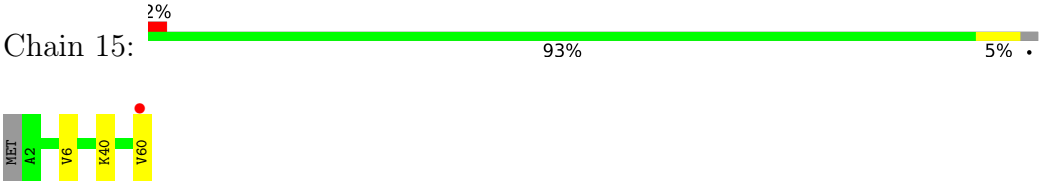
• Molecule 26: 50S ribosomal protein L31

Chain 24:



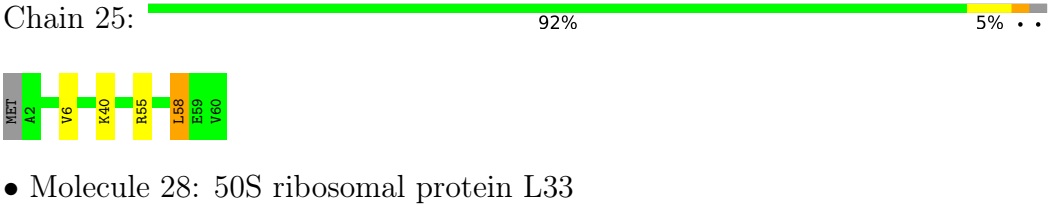
• Molecule 27: 50S ribosomal protein L32

Chain 15:



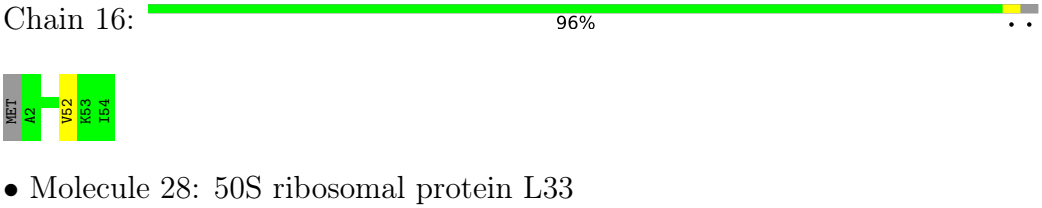
• Molecule 27: 50S ribosomal protein L32

Chain 25:



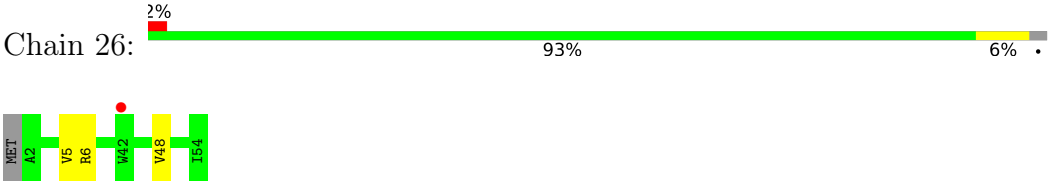
• Molecule 28: 50S ribosomal protein L33

Chain 16:



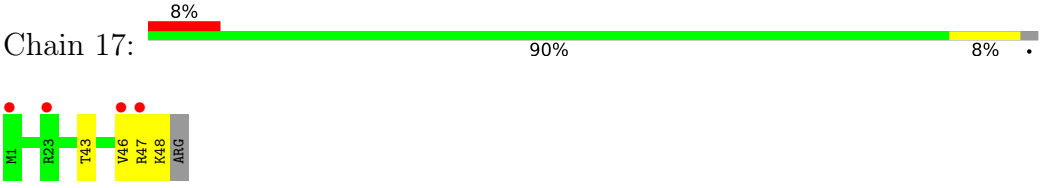
• Molecule 28: 50S ribosomal protein L33

Chain 26:



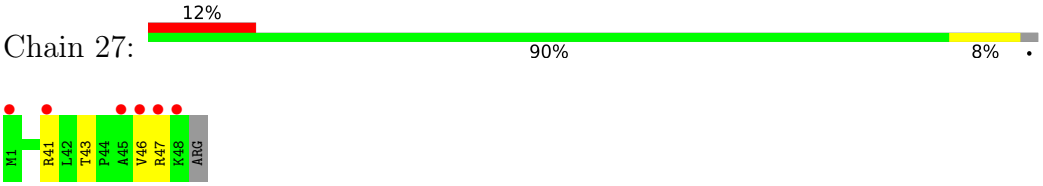
• Molecule 29: 50S ribosomal protein L34

Chain 17:



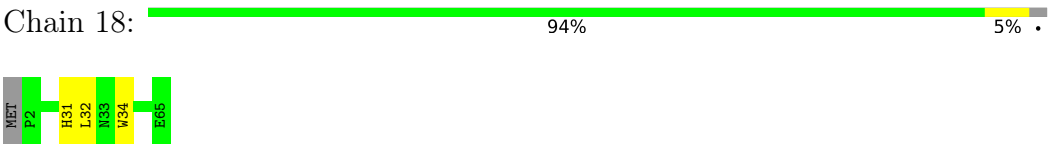
• Molecule 29: 50S ribosomal protein L34

Chain 27:



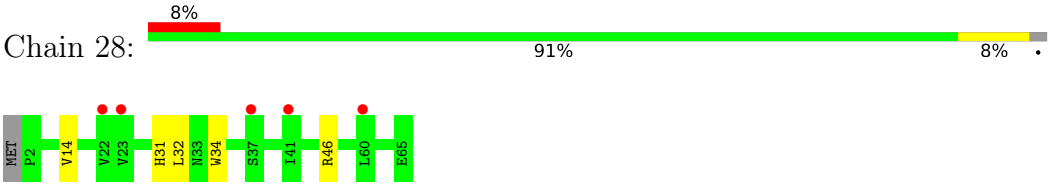
• Molecule 30: 50S ribosomal protein L35

Chain 18:



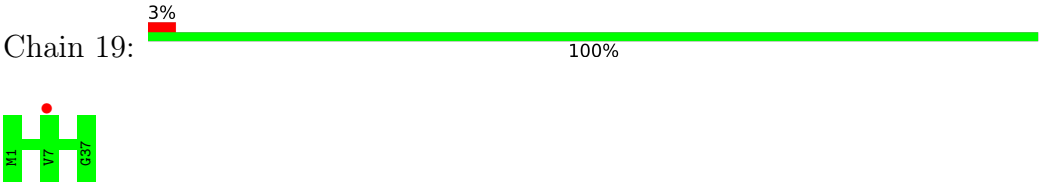
• Molecule 30: 50S ribosomal protein L35

Chain 28:



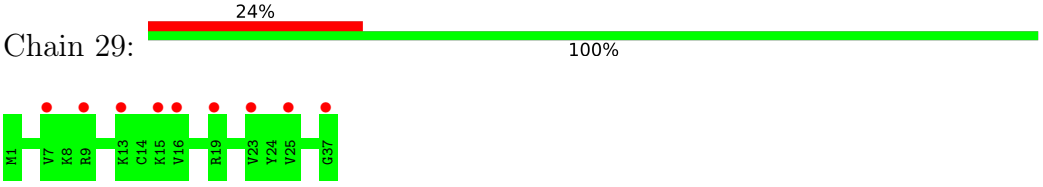
• Molecule 31: 50S ribosomal protein L36

Chain 19:



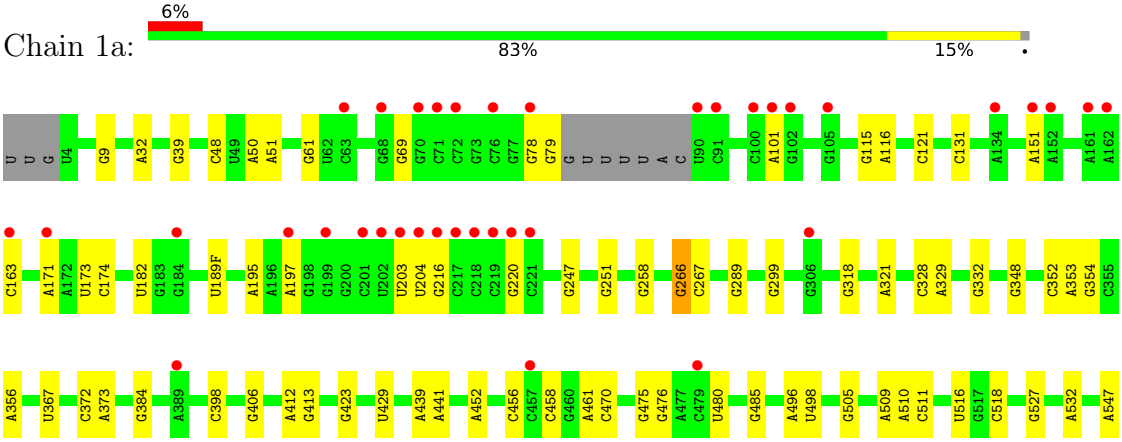
• Molecule 31: 50S ribosomal protein L36

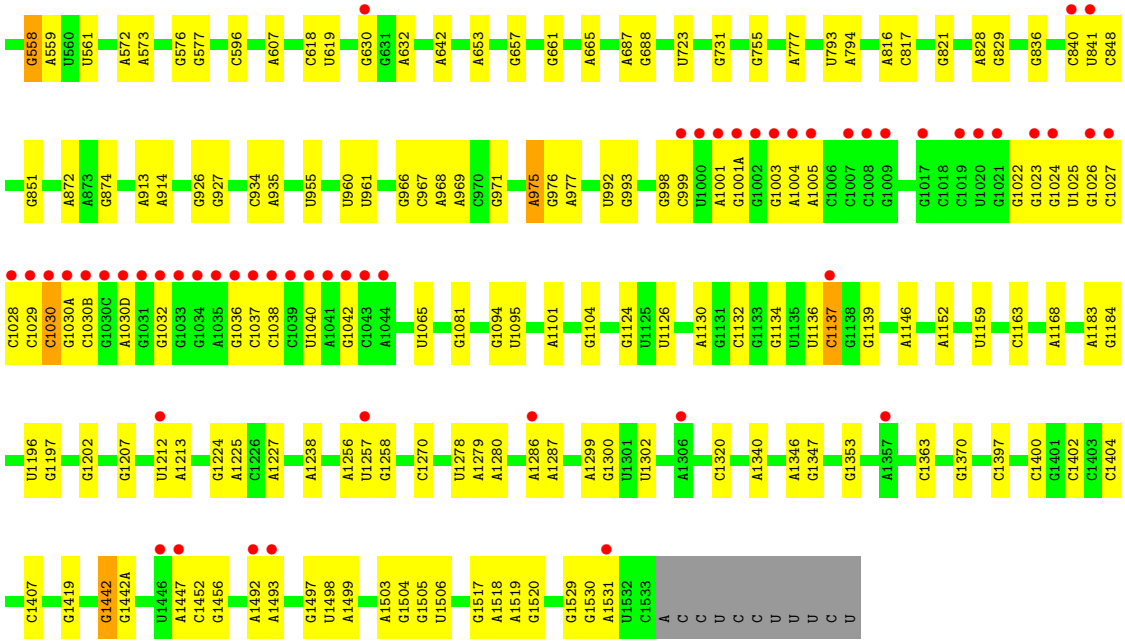
Chain 29:



• Molecule 32: 16S Ribosomal RNA

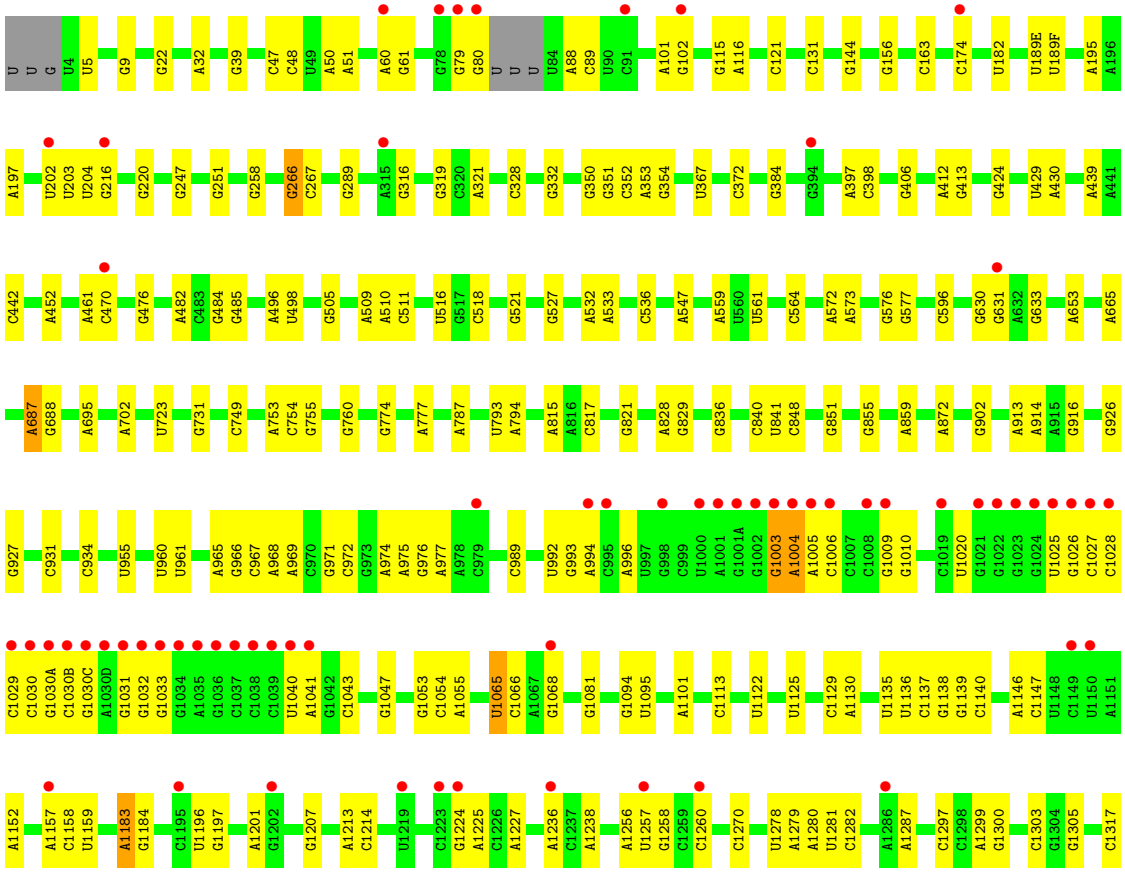
Chain 1a:

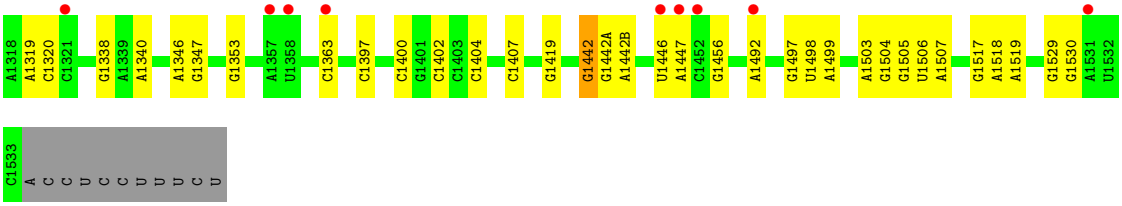




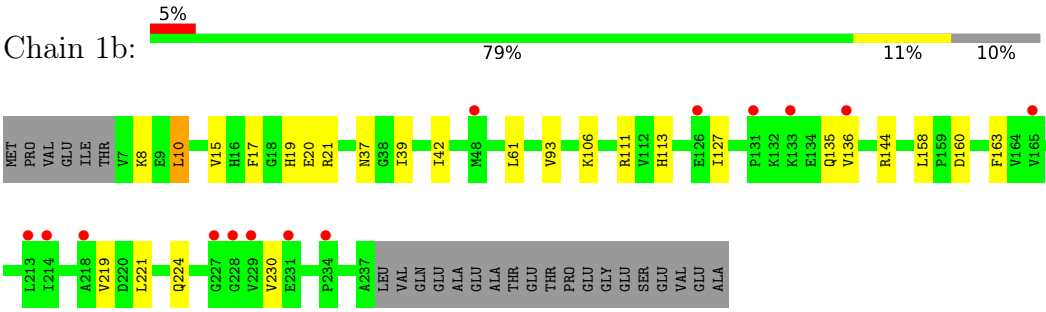
• Molecule 32: 16S Ribosomal RNA

Chain 2a:

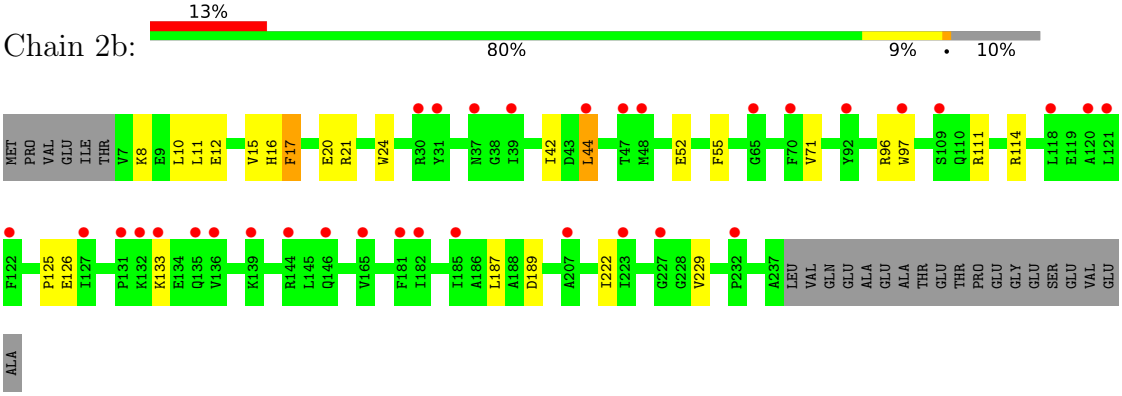




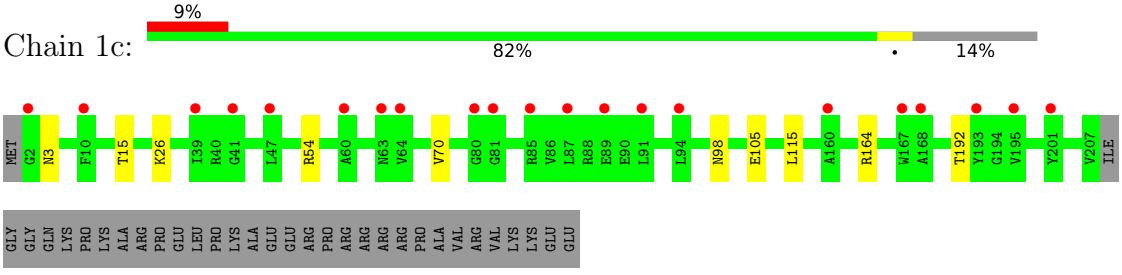
• Molecule 33: 30S ribosomal protein S2



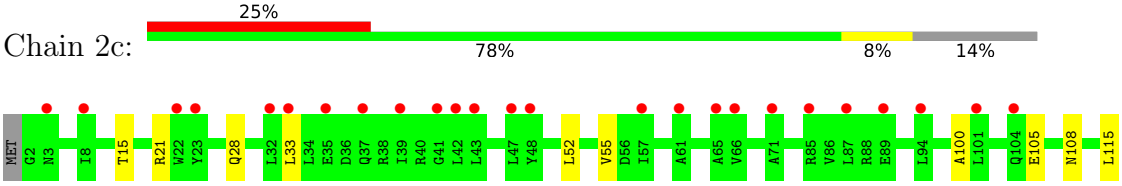
• Molecule 33: 30S ribosomal protein S2

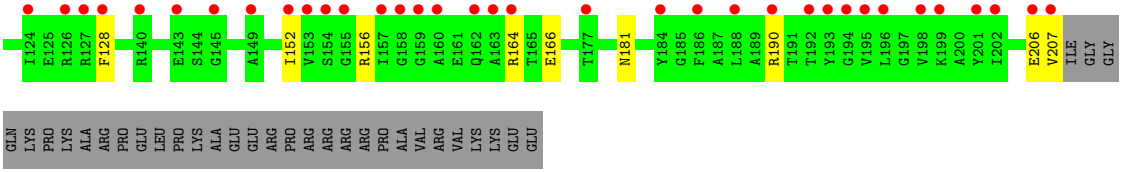


• Molecule 34: 30S ribosomal protein S3

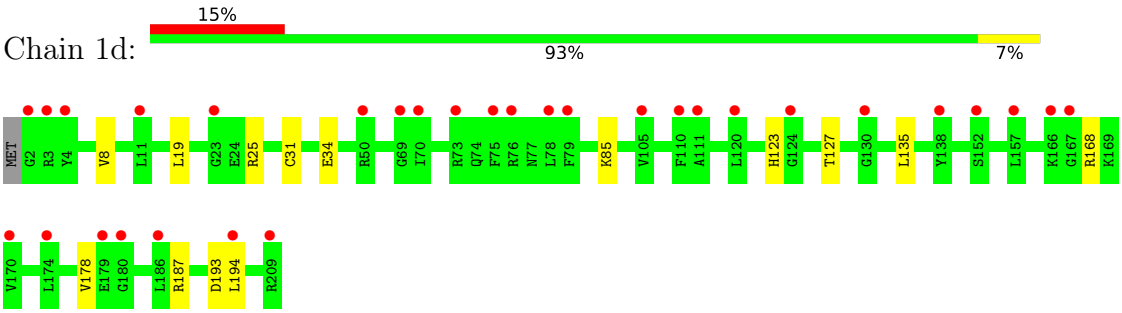


• Molecule 34: 30S ribosomal protein S3

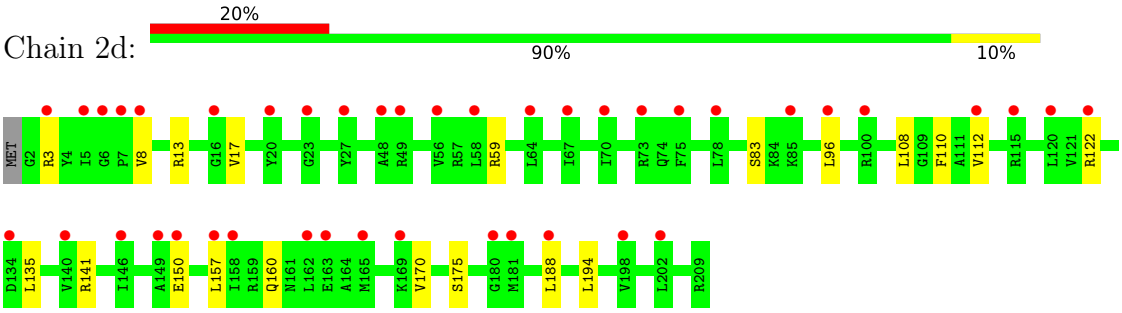




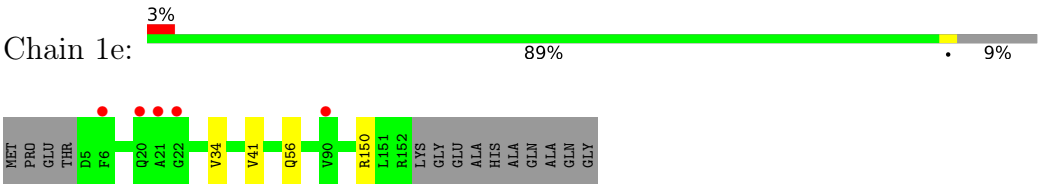
• Molecule 35: 30S ribosomal protein S4



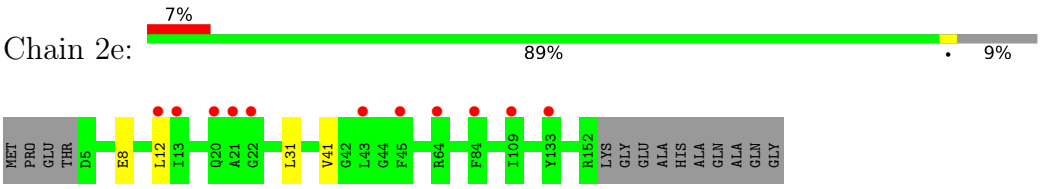
• Molecule 35: 30S ribosomal protein S4



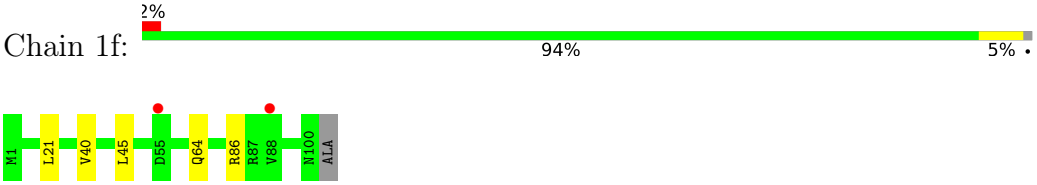
• Molecule 36: 30S ribosomal protein S5



• Molecule 36: 30S ribosomal protein S5

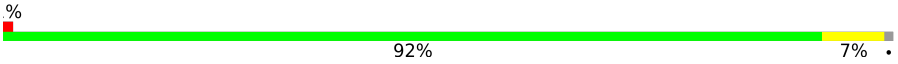


• Molecule 37: 30S ribosomal protein S6



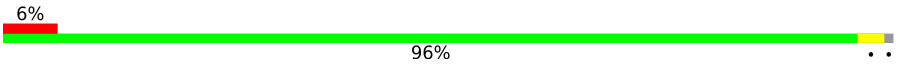
• Molecule 37: 30S ribosomal protein S6

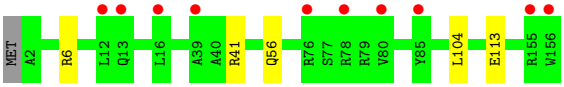
Chain 2f:



• Molecule 38: 30S ribosomal protein S7

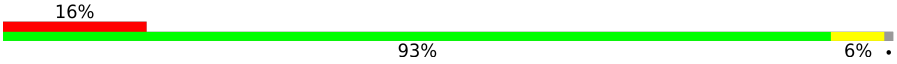
Chain 1g:

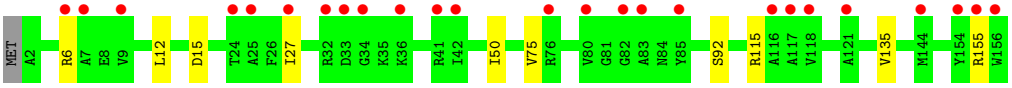




• Molecule 38: 30S ribosomal protein S7

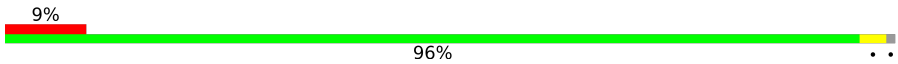
Chain 2g:

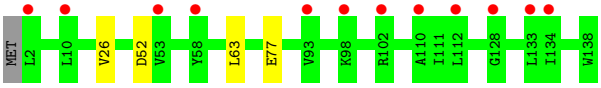




• Molecule 39: 30S ribosomal protein S8

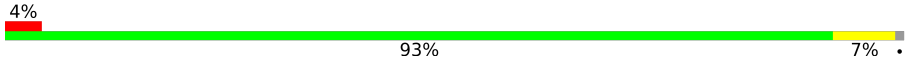
Chain 1h:

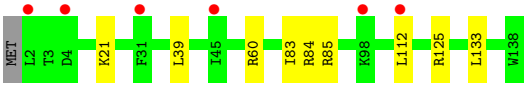




• Molecule 39: 30S ribosomal protein S8

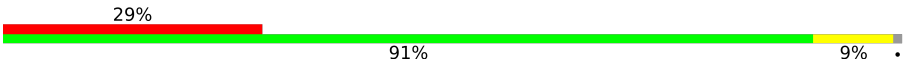
Chain 2h:

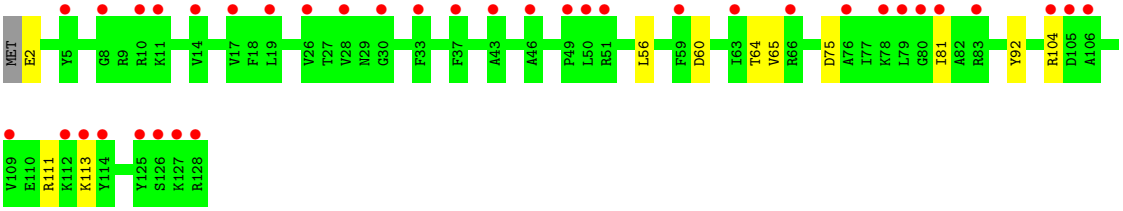




• Molecule 40: 30S ribosomal protein S9

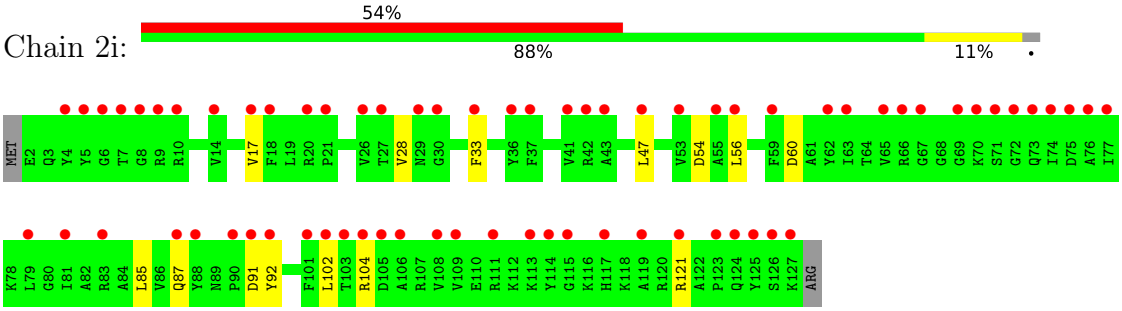
Chain 1i:





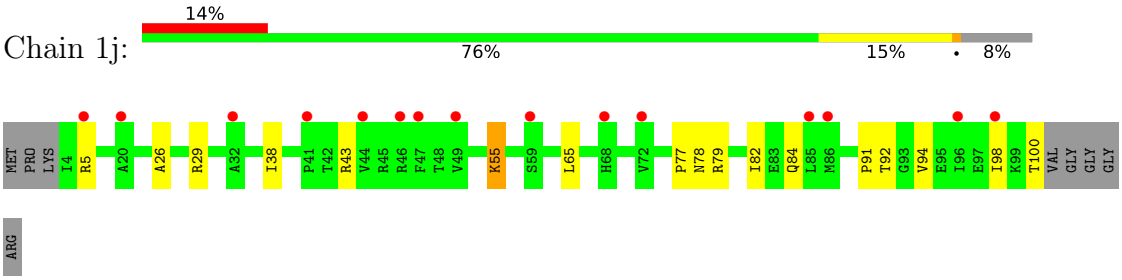
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



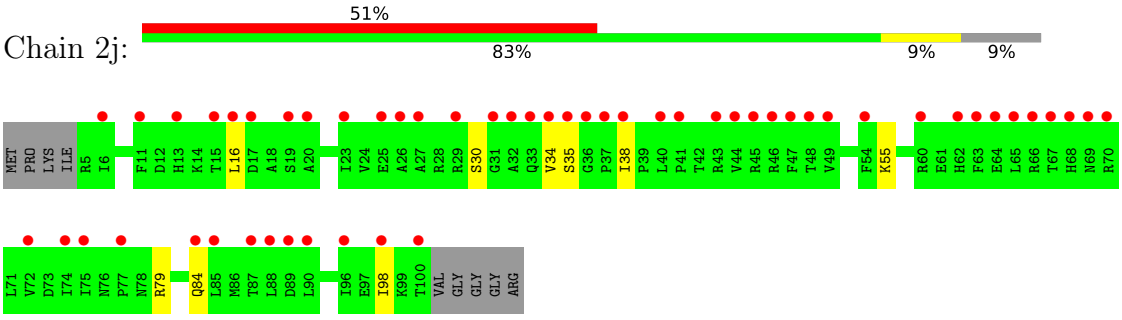
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



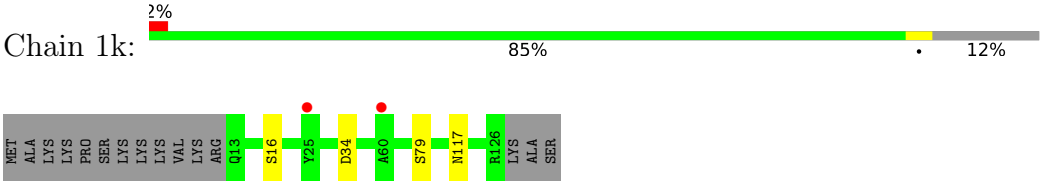
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



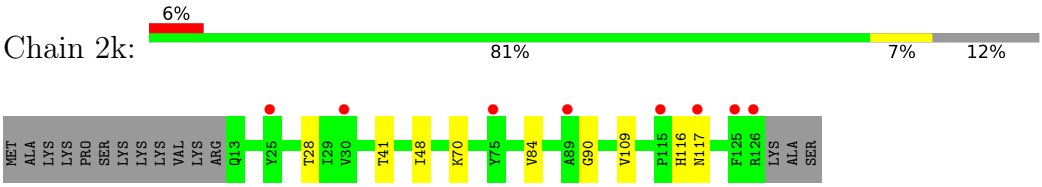
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



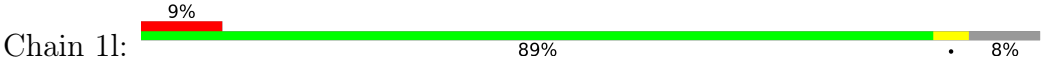
• Molecule 42: 30S ribosomal protein S11

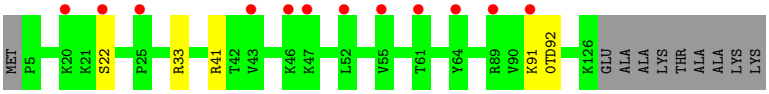
Chain 2k:



• Molecule 43: 30S ribosomal protein S12

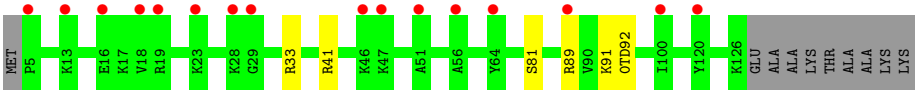
Chain 1l:





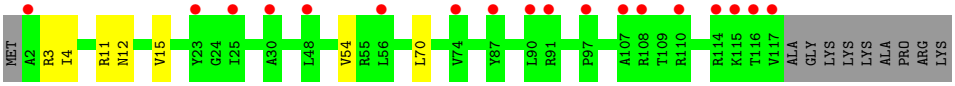
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



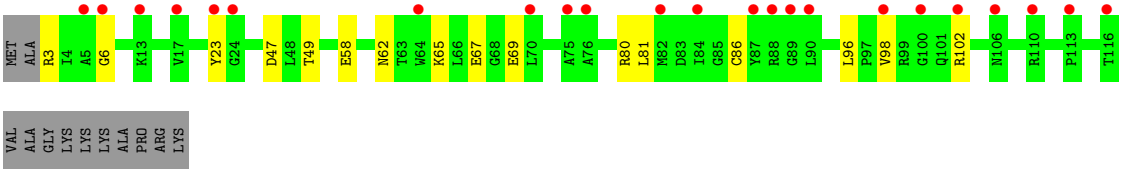
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



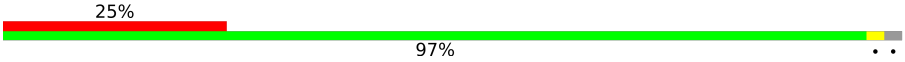
• Molecule 44: 30S ribosomal protein S13

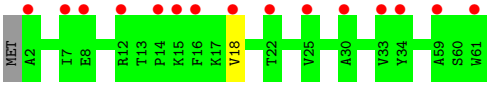
Chain 2m:



• Molecule 45: 30S ribosomal protein S14 type Z

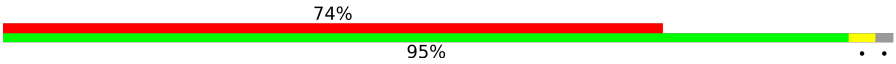
Chain 1n:

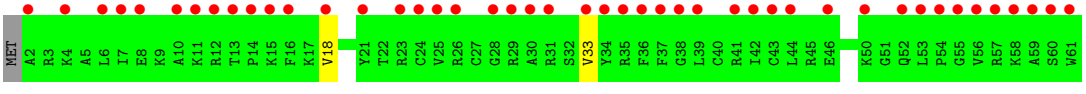




• Molecule 45: 30S ribosomal protein S14 type Z

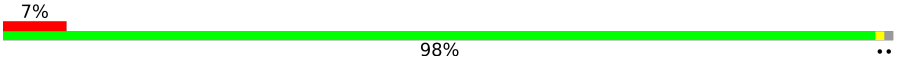
Chain 2n:

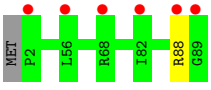




• Molecule 46: 30S ribosomal protein S15

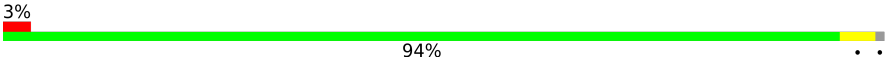
Chain 1o:

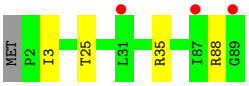




• Molecule 46: 30S ribosomal protein S15

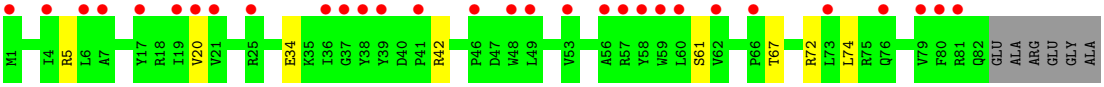
Chain 2o:





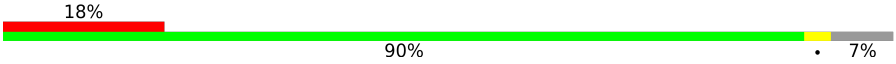
• Molecule 47: 30S ribosomal protein S16

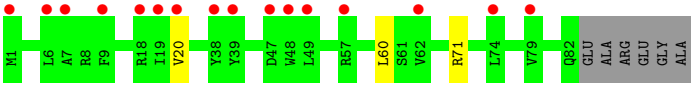
Chain 1p:



• Molecule 47: 30S ribosomal protein S16

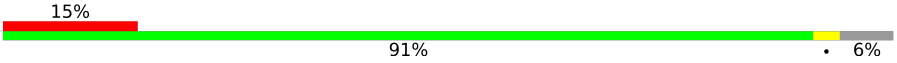
Chain 2p:

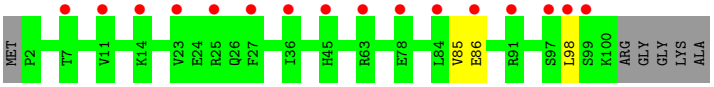




• Molecule 48: 30S ribosomal protein S17

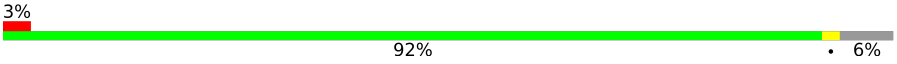
Chain 1q:

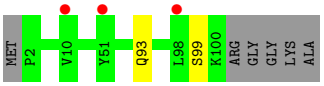




• Molecule 48: 30S ribosomal protein S17

Chain 2q:





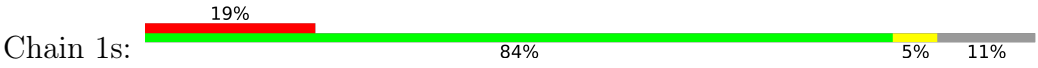
• Molecule 49: 30S ribosomal protein S18

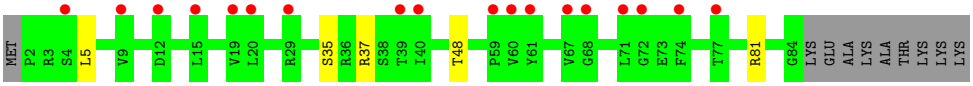
Chain 1r:

• Molecule 49: 30S ribosomal protein S18

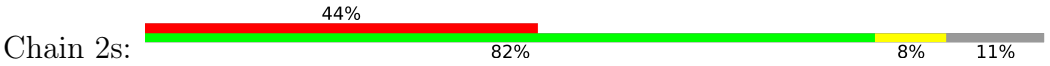
Chain 2r:

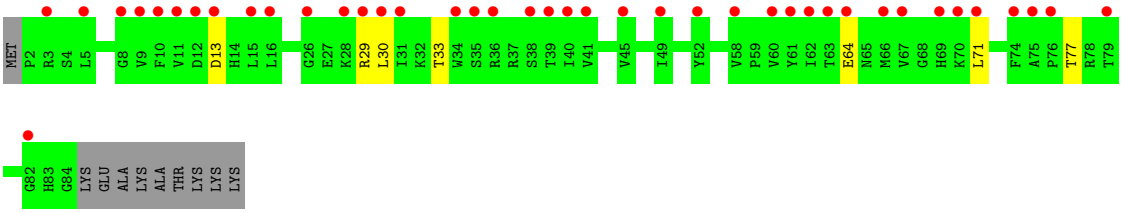
• Molecule 50: 30S ribosomal protein S19



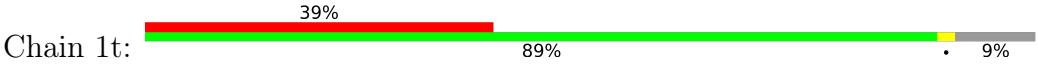


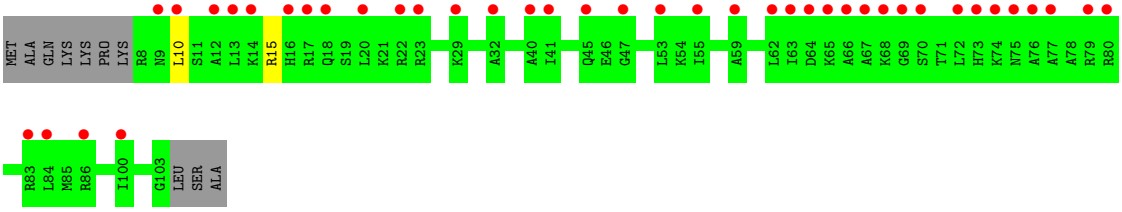
• Molecule 50: 30S ribosomal protein S19



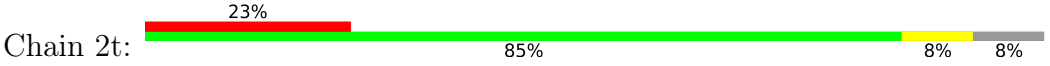


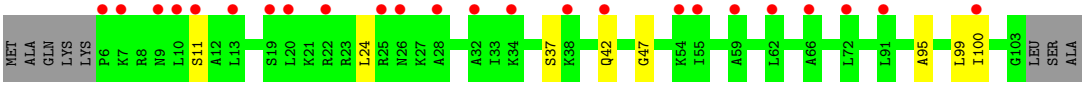
• Molecule 51: 30S ribosomal protein S20



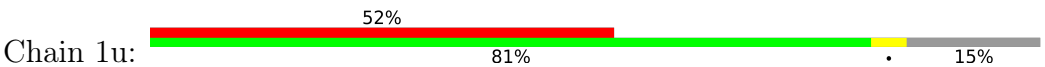


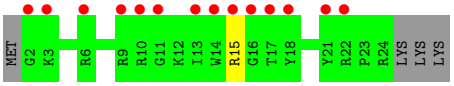
• Molecule 51: 30S ribosomal protein S20





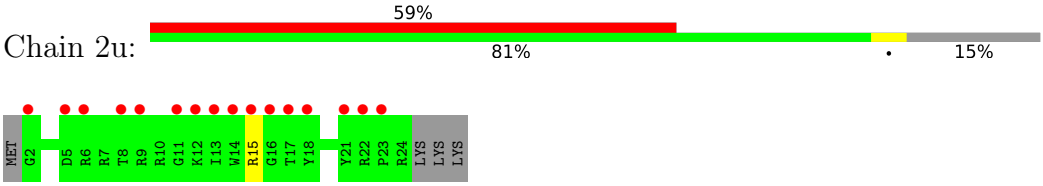
• Molecule 52: 30S ribosomal protein Thx





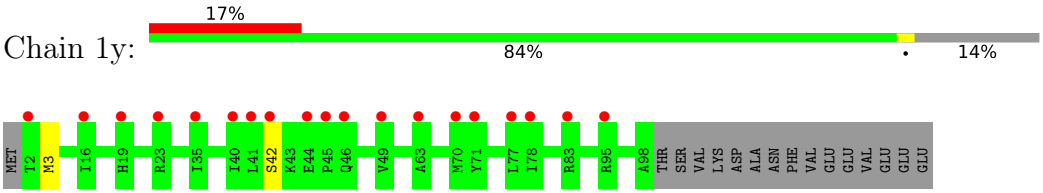
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



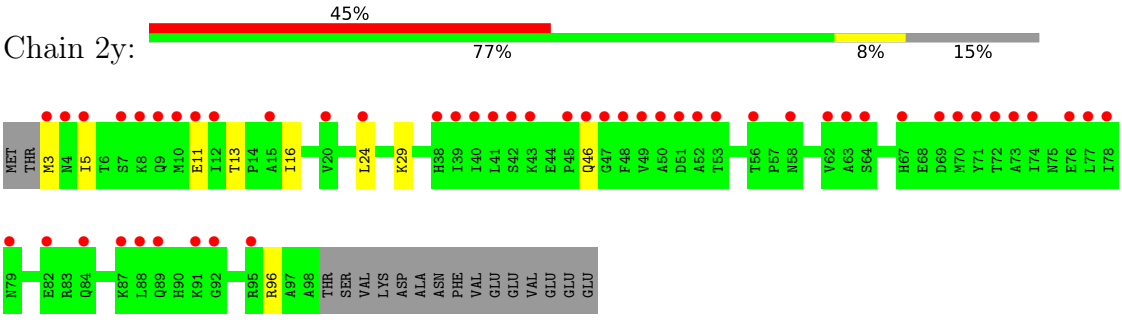
• Molecule 53: Ribosome-associated inhibitor A

Chain 1y:



• Molecule 53: Ribosome-associated inhibitor A

Chain 2y:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.60Å 449.32Å 619.65Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	124.58 – 2.35 198.55 – 2.35	Depositor EDS
% Data completeness (in resolution range)	100.0 (124.58-2.35) 100.0 (198.55-2.35)	Depositor EDS
R_{merge}	0.19	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.19 (at 2.34Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.207 , 0.243 0.207 , 0.243	Depositor DCC
R_{free} test set	119915 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	49.6	Xtriage
Anisotropy	0.134	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 47.9	EDS
L-test for twinning[2]	$< \|L\| > = 0.44$, $< L^2 > = 0.27$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	296775	wwPDB-VP
Average B, all atoms (Å^2)	60.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.52% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: SF4, MG, 4OC, MA6, 2MG, ZN, OMU, PSU, A1AE1, 5MC, MPD, 5MU, M2G, 0TD, UR3, 2MA, G7M, OMC, OMG

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	1A	0.53	2/69031 (0.0%)	1.00	119/107754 (0.1%)
1	2A	0.42	0/68903	0.89	45/107552 (0.0%)
2	1B	0.40	0/2876	0.86	0/4486
2	2B	0.36	0/2878	0.80	0/4490
3	1D	0.36	0/2181	0.61	0/2940
3	2D	0.33	0/2186	0.53	0/2944
4	1E	0.34	0/1592	0.55	0/2149
4	2E	0.31	0/1592	0.52	0/2149
5	1F	0.35	0/1619	0.56	0/2193
5	2F	0.30	0/1615	0.53	0/2188
6	1G	0.30	0/1451	0.48	0/1961
6	2G	0.31	0/1449	0.48	0/1957
7	1H	0.31	0/1356	0.53	1/1834 (0.1%)
7	2H	0.30	0/1350	0.48	0/1826
8	1I	0.28	0/1109	0.49	0/1512
8	2I	0.28	0/1091	0.48	0/1490
9	1N	0.33	0/1148	0.55	0/1547
9	2N	0.30	0/1144	0.46	0/1543
10	1O	0.37	0/943	0.57	0/1269
10	2O	0.32	0/943	0.53	0/1269
11	1P	0.35	0/1152	0.60	0/1533
11	2P	0.30	0/1152	0.54	0/1533
12	1Q	0.37	0/1143	0.54	0/1527
12	2Q	0.30	0/1143	0.49	0/1527
13	1R	0.34	0/982	0.54	0/1312
13	2R	0.29	0/982	0.50	0/1312
14	1S	0.33	0/887	0.52	0/1180
14	2S	0.31	0/880	0.49	0/1172
15	1T	0.34	0/1105	0.55	0/1477
15	2T	0.30	0/1097	0.48	0/1468
16	1U	0.37	0/977	0.56	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.30	0/977	0.46	0/1301
17	1V	0.35	0/786	0.57	0/1053
17	2V	0.32	0/782	0.52	0/1049
18	1W	0.36	0/897	0.54	0/1205
18	2W	0.32	0/897	0.49	0/1205
19	1X	0.38	0/764	0.54	0/1025
19	2X	0.31	0/764	0.51	0/1025
20	1Y	0.34	0/823	0.54	0/1099
20	2Y	0.32	0/823	0.52	0/1100
21	1Z	0.32	0/1620	0.50	0/2200
21	2Z	0.29	0/1590	0.47	0/2162
22	10	0.35	0/662	0.55	0/881
22	20	0.32	0/659	0.51	0/877
23	11	0.34	0/761	0.54	0/1013
23	21	0.32	0/766	0.53	0/1018
24	12	0.31	0/590	0.50	0/781
24	22	0.29	0/594	0.42	0/785
25	13	0.32	0/474	0.52	0/635
25	23	0.30	0/469	0.50	0/630
26	14	0.33	0/559	0.54	0/754
26	24	0.36	0/549	0.56	0/741
27	15	0.37	0/473	0.62	0/639
27	25	0.31	0/469	0.56	1/635 (0.2%)
28	16	0.33	0/460	0.57	0/613
28	26	0.28	0/456	0.50	0/608
29	17	0.35	0/426	0.57	0/561
29	27	0.30	0/426	0.48	0/561
30	18	0.35	0/525	0.60	0/691
30	28	0.31	0/525	0.50	0/691
31	19	0.35	0/310	0.54	0/407
31	29	0.31	0/310	0.52	0/407
32	1a	0.38	0/35795	0.86	18/55864 (0.0%)
32	2a	0.37	0/35890	0.85	26/56012 (0.0%)
33	1b	0.30	0/1876	0.47	0/2533
33	2b	0.33	0/1860	0.50	0/2518
34	1c	0.31	0/1582	0.46	0/2137
34	2c	0.29	0/1566	0.46	0/2119
35	1d	0.30	0/1695	0.50	0/2274
35	2d	0.29	0/1698	0.46	0/2277
36	1e	0.29	0/1149	0.51	0/1548
36	2e	0.30	0/1149	0.48	0/1548
37	1f	0.31	0/827	0.48	0/1120
37	2f	0.30	0/829	0.48	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.28	0/1254	0.42	0/1683
38	2g	0.29	0/1248	0.44	0/1676
39	1h	0.29	0/1118	0.49	0/1506
39	2h	0.28	0/1108	0.47	0/1494
40	1i	0.29	0/1005	0.47	0/1351
40	2i	0.31	0/985	0.49	0/1329
41	1j	0.30	0/732	0.49	0/993
41	2j	0.30	0/723	0.51	0/984
42	1k	0.29	0/849	0.49	0/1150
42	2k	0.30	0/848	0.53	0/1149
43	1l	0.31	0/937	0.52	0/1260
43	2l	0.29	0/937	0.51	0/1260
44	1m	0.27	0/924	0.46	0/1242
44	2m	0.29	0/905	0.47	0/1217
45	1n	0.31	0/501	0.45	0/664
45	2n	0.31	0/501	0.47	0/664
46	1o	0.30	0/739	0.50	0/985
46	2o	0.29	0/739	0.42	0/985
47	1p	0.28	0/697	0.52	0/939
47	2p	0.27	0/693	0.49	0/935
48	1q	0.28	0/836	0.46	0/1117
48	2q	0.29	0/836	0.46	0/1117
49	1r	0.28	0/560	0.48	0/746
49	2r	0.31	0/560	0.47	0/746
50	1s	0.30	0/663	0.49	0/895
50	2s	0.29	0/660	0.48	0/893
51	1t	0.28	0/734	0.44	0/969
51	2t	0.27	0/736	0.43	0/976
52	1u	0.26	0/203	0.45	0/266
52	2u	0.26	0/203	0.47	0/266
53	1y	0.28	0/776	0.47	0/1048
53	2y	0.27	0/761	0.44	0/1030
All	All	0.41	2/310030 (0.0%)	0.82	210/463355 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
21	2Z	0	1
26	24	0	1
All	All	0	2

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2790	A	N9-C4	5.44	1.41	1.37
1	1A	330	A	N9-C4	-5.33	1.34	1.37

All (210) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	512	G	O4'-C1'-N9	12.63	118.30	108.20
1	1A	570	G	C5-C6-O6	-12.24	121.26	128.60
1	1A	1075	C	N1-C2-O2	10.44	125.16	118.90
1	1A	1395	A	O5'-P-OP1	-10.26	96.47	105.70
1	1A	2554	U	O5'-P-OP1	-10.21	96.51	105.70
1	1A	2577	A	O5'-P-OP1	-10.12	96.59	105.70
1	1A	1352	U	O5'-P-OP1	-9.82	96.86	105.70
1	1A	946	G	O5'-P-OP1	-9.57	97.09	105.70
1	1A	2430	A	O5'-P-OP2	-9.50	97.15	105.70
1	2A	576	U	O5'-P-OP1	-9.25	97.38	105.70
1	2A	1092	C	N1-C2-O2	8.78	124.17	118.90
1	2A	1092	C	C2-N1-C1'	8.50	128.15	118.80
1	1A	1791	A	O5'-P-OP1	-8.48	98.07	105.70
1	1A	1602	U	N3-C4-O4	-8.40	113.52	119.40
1	1A	1997	G	O5'-P-OP2	-7.97	98.52	105.70
1	1A	2682	U	O5'-P-OP2	-7.92	98.57	105.70
1	1A	570	G	C5-C6-N1	7.76	115.38	111.50
1	1A	330	A	C2-N3-C4	-7.68	106.76	110.60
1	1A	570	G	C4-C5-N7	7.66	113.86	110.80
1	1A	570	G	N9-C4-C5	-7.64	102.34	105.40
1	1A	645	C	C2-N1-C1'	7.61	127.17	118.80
1	1A	1075	C	N3-C2-O2	-7.55	116.62	121.90
1	1A	1349	A	O5'-P-OP1	-7.55	98.91	105.70
1	1A	1086	A	N1-C6-N6	-7.54	114.08	118.60
1	2A	512	G	O4'-C1'-N9	7.50	114.20	108.20
7	1H	171	LEU	C-N-CA	7.50	140.44	121.70
1	1A	1272	A	O5'-P-OP2	-7.46	98.99	105.70
1	2A	1614	A	O5'-P-OP1	-7.44	99.01	105.70
1	2A	1664	A	O5'-P-OP2	-7.35	99.08	105.70
1	1A	1372	U	C5-C4-O4	-7.33	121.50	125.90
1	1A	1139	G	O5'-P-OP2	-7.28	99.15	105.70
32	1a	558	G	O5'-P-OP1	-7.25	99.17	105.70
1	1A	1653	G	C8-N9-C4	-7.25	103.50	106.40
1	1A	2061	G	O5'-P-OP2	-7.17	99.25	105.70
1	1A	801	G	O5'-P-OP2	-7.13	99.28	105.70
1	1A	845	G	O4'-C1'-N9	7.10	113.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2499	C	O5'-P-OP2	-7.08	99.33	105.70
1	1A	12	U	N3-C2-O2	-7.07	117.25	122.20
1	1A	645	C	N1-C2-O2	7.07	123.14	118.90
32	2a	955	U	C5-C4-O4	7.04	130.13	125.90
1	1A	1253	A	C5-N7-C8	6.94	107.37	103.90
1	1A	576	U	O5'-P-OP1	-6.92	99.47	105.70
1	2A	1992	G	P-O3'-C3'	6.88	127.96	119.70
32	1a	299	G	C5-C6-O6	-6.84	124.50	128.60
1	1A	330	A	N1-C2-N3	6.84	132.72	129.30
32	2a	1183	A	P-O3'-C3'	6.81	127.87	119.70
32	2a	1225	A	C6-N1-C2	6.77	122.66	118.60
32	1a	1137	C	C6-N1-C2	-6.75	117.60	120.30
1	2A	1092	C	N3-C2-O2	-6.74	117.19	121.90
32	2a	266	G	P-O3'-C3'	6.73	127.78	119.70
1	1A	1153	C	O5'-P-OP2	-6.72	99.65	105.70
32	2a	1004	A	O4'-C1'-N9	6.69	113.55	108.20
1	2A	1075	C	N1-C2-O2	6.67	122.90	118.90
1	1A	2848	G	O4'-C1'-N9	6.64	113.51	108.20
1	1A	746	A	O4'-C1'-N9	6.61	113.49	108.20
32	2a	955	U	C2-N3-C4	6.58	130.95	127.00
1	2A	1639	U	O5'-P-OP2	-6.57	99.79	105.70
1	2A	961	C	C6-N1-C2	6.55	122.92	120.30
32	2a	1158	C	C2-N1-C1'	6.55	126.01	118.80
1	1A	1026	U	C2-N1-C1'	6.55	125.56	117.70
1	1A	996	A	O5'-P-OP1	-6.49	99.86	105.70
1	1A	948	G	O5'-P-OP1	-6.47	99.88	105.70
32	2a	1225	A	C5-C6-N6	6.46	128.87	123.70
1	1A	1372	U	N3-C4-O4	6.44	123.91	119.40
1	1A	372	G	O4'-C1'-N9	6.41	113.33	108.20
1	2A	1075	C	N3-C2-O2	-6.38	117.44	121.90
1	2A	1993	U	O5'-P-OP1	-6.37	99.97	105.70
1	1A	568	U	C5-C4-O4	-6.35	122.09	125.90
1	2A	746	A	O4'-C1'-N9	6.32	113.26	108.20
1	1A	226	G	O4'-C1'-N9	6.32	113.25	108.20
32	1a	955	U	C5-C4-O4	6.27	129.66	125.90
1	1A	1647	G	O4'-C1'-N9	-6.23	103.21	108.20
1	2A	2554	U	O5'-P-OP1	-6.21	100.11	105.70
1	2A	2689	U	P-O3'-C3'	6.20	127.13	119.70
1	2A	12	U	N3-C2-O2	-6.19	117.87	122.20
1	2A	1092	C	C6-N1-C2	-6.11	117.86	120.30
1	1A	975	C	O5'-P-OP1	-6.10	100.21	105.70
1	1A	1602	U	N1-C2-O2	6.10	127.07	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1075	C	C2-N3-C4	6.09	122.94	119.90
1	1A	568	U	N3-C4-C5	6.05	118.23	114.60
1	1A	1602	U	N3-C4-C5	6.04	118.23	114.60
32	2a	1158	C	N1-C2-O2	6.04	122.52	118.90
1	1A	2023	G	O5'-P-OP1	-6.02	100.28	105.70
1	1A	787	U	O5'-P-OP1	-6.01	100.30	105.70
1	1A	570	G	C8-N9-C4	6.00	108.80	106.40
32	1a	955	U	C2-N3-C4	5.98	130.59	127.00
1	2A	1936	A	O4'-C1'-N9	5.97	112.98	108.20
32	1a	1137	C	C5-C6-N1	5.96	123.98	121.00
27	25	58	LEU	CA-CB-CG	5.92	128.93	115.30
1	1A	195	A	P-O3'-C3'	5.90	126.78	119.70
1	1A	1829	A	C8-N9-C4	5.90	108.16	105.80
1	1A	1253	A	N7-C8-N9	-5.87	110.86	113.80
1	1A	2028	U	N3-C4-C5	5.86	118.12	114.60
32	1a	1030	C	C2-N3-C4	5.86	122.83	119.90
32	1a	913	A	P-O3'-C3'	5.85	126.72	119.70
1	1A	2036	C	O5'-P-OP1	-5.83	100.45	105.70
1	2A	1076	C	OP1-P-O3'	5.82	118.00	105.20
1	1A	1416	G	O4'-C1'-N9	5.79	112.83	108.20
1	2A	1648	C	O5'-P-OP1	-5.79	100.49	105.70
1	1A	2501	C	C2-N1-C1'	-5.79	112.43	118.80
1	2A	752	A	P-O3'-C3'	5.76	126.61	119.70
1	1A	2249	U	N3-C4-O4	-5.75	115.37	119.40
32	2a	1183	A	OP1-P-O3'	5.75	117.85	105.20
1	1A	570	G	N1-C6-O6	5.74	123.34	119.90
32	1a	1442	G	C2-N3-C4	5.74	114.77	111.90
1	2A	1696	G	O5'-P-OP2	-5.73	100.54	105.70
1	1A	570	G	N3-C4-N9	5.72	129.44	126.00
1	1A	1612	C	N1-C2-O2	-5.72	115.47	118.90
1	1A	2429	G	OP1-P-OP2	-5.71	111.03	119.60
1	1A	575	A	O5'-P-OP1	-5.68	100.59	105.70
1	2A	1092	C	C6-N1-C1'	-5.68	113.99	120.80
1	2A	1094	U	O4'-C1'-N1	5.67	112.74	108.20
1	1A	784	A	P-O3'-C3'	5.67	126.50	119.70
1	2A	2137	C	C5-C4-N4	5.64	124.14	120.20
1	1A	195	A	C5-N7-C8	5.63	106.71	103.90
1	1A	1639	U	O5'-P-OP2	-5.62	100.64	105.70
1	1A	1385	G	O4'-C1'-N9	5.62	112.69	108.20
1	1A	607	U	O5'-P-OP1	-5.61	100.66	105.70
1	2A	1671	U	O5'-P-OP2	-5.61	100.66	105.70
1	1A	1936	A	O4'-C1'-N9	5.56	112.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	845	G	O4'-C1'-N9	5.56	112.65	108.20
32	1a	266	G	P-O3'-C3'	5.53	126.34	119.70
1	1A	2790	A	C2-N3-C4	5.53	113.36	110.60
1	2A	1313	U	C2-N1-C1'	5.53	124.33	117.70
1	2A	1060	U	C2-N1-C1'	5.52	124.33	117.70
1	1A	784	A	OP1-P-O3'	5.51	117.33	105.20
1	1A	2685	G	N1-C6-O6	-5.50	116.60	119.90
1	2A	1368	G	O5'-P-OP2	-5.50	100.75	105.70
1	1A	198	C	O5'-P-OP2	-5.47	100.77	105.70
1	1A	12	U	N1-C2-O2	5.47	126.63	122.80
32	2a	754	C	C2-N1-C1'	5.47	124.82	118.80
1	1A	383	U	O4'-C1'-N1	5.45	112.56	108.20
1	2A	531	C	O5'-P-OP2	-5.45	100.80	105.70
1	1A	450	G	N1-C6-O6	-5.45	116.63	119.90
1	1A	1653	G	N3-C4-C5	-5.44	125.88	128.60
1	1A	527	C	N1-C2-O2	-5.43	115.64	118.90
1	1A	783	A	C2-N3-C4	5.41	113.31	110.60
1	2A	793	A	O5'-P-OP2	-5.41	100.84	105.70
1	1A	740	U	O5'-P-OP2	-5.40	100.84	105.70
1	1A	2319	G	O4'-C1'-N9	5.40	112.52	108.20
1	1A	2593	U	N3-C4-O4	-5.39	115.62	119.40
1	2A	2689	U	N3-C2-O2	-5.39	118.42	122.20
32	2a	79	G	C5-C6-O6	5.39	131.83	128.60
32	1a	115	G	P-O3'-C3'	5.38	126.15	119.70
32	1a	1225	A	C6-N1-C2	5.36	121.81	118.60
1	1A	761	A	C5-N7-C8	5.34	106.57	103.90
1	1A	1493	C	N1-C2-O2	5.34	122.10	118.90
32	2a	1033	G	C6-N1-C2	5.34	128.30	125.10
1	1A	1075	C	C2-N1-C1'	5.33	124.66	118.80
32	1a	266	G	N3-C4-C5	-5.33	125.93	128.60
1	2A	383	U	O4'-C1'-N1	5.33	112.46	108.20
32	2a	1158	C	C6-N1-C2	-5.32	118.17	120.30
1	1A	2032	G	C5-N7-C8	5.31	106.95	104.30
1	1A	450	G	C5-C6-N1	5.31	114.15	111.50
32	2a	687	A	P-O3'-C3'	5.30	126.06	119.70
32	2a	1442	G	N3-C4-N9	5.30	129.18	126.00
1	1A	888	C	P-O3'-C3'	5.29	126.05	119.70
32	2a	1033	G	C5-C6-O6	5.29	131.77	128.60
1	1A	859	G	O4'-C1'-N9	-5.28	103.98	108.20
1	2A	2036	C	O5'-P-OP1	-5.27	100.95	105.70
32	2a	1065	U	P-O3'-C3'	5.27	126.03	119.70
1	1A	12	U	C2-N1-C1'	5.26	124.02	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1026	U	N1-C2-O2	5.26	126.48	122.80
32	1a	1442	G	N3-C4-C5	-5.24	125.98	128.60
1	2A	1210	A	P-O3'-C3'	5.24	125.99	119.70
1	1A	996	A	O5'-P-OP2	5.24	116.98	110.70
32	1a	266	G	N3-C4-N9	5.23	129.14	126.00
1	1A	1210	A	P-O3'-C3'	5.23	125.97	119.70
1	1A	2015	A	C8-N9-C4	5.22	107.89	105.80
1	2A	944	G	C4-N9-C1'	5.22	133.29	126.50
32	1a	872	A	O4'-C1'-N9	5.22	112.37	108.20
32	1a	687	A	P-O3'-C3'	5.21	125.96	119.70
32	2a	754	C	N1-C2-O2	5.21	122.03	118.90
1	1A	645	C	C6-N1-C1'	-5.21	114.55	120.80
1	2A	607	U	O5'-P-OP1	-5.20	101.02	105.70
1	1A	1648	C	O5'-P-OP1	-5.19	101.03	105.70
1	1A	943	U	O5'-P-OP2	-5.19	101.03	105.70
1	1A	383	U	C2-N1-C1'	-5.18	111.48	117.70
1	2A	784	A	OP1-P-O3'	5.18	116.59	105.20
1	1A	704	G	O4'-C1'-N9	5.17	112.34	108.20
1	2A	1791	A	O5'-P-OP1	-5.16	101.06	105.70
1	1A	645	C	C6-N1-C2	-5.15	118.24	120.30
1	1A	271(Y)	U	O4'-C1'-N1	5.15	112.32	108.20
32	1a	975	A	O4'-C1'-N9	-5.14	104.09	108.20
32	2a	115	G	P-O3'-C3'	5.14	125.87	119.70
1	1A	645	C	N3-C2-O2	-5.14	118.30	121.90
1	2A	2103	C	C2-N3-C4	5.14	122.47	119.90
1	1A	2697	G	C4-C5-N7	-5.14	108.75	110.80
1	1A	2689	U	N3-C2-O2	-5.13	118.61	122.20
1	1A	1075	C	C6-N1-C2	-5.13	118.25	120.30
1	1A	1372	U	C2-N1-C1'	5.12	123.85	117.70
32	2a	1158	C	N3-C2-O2	-5.12	118.31	121.90
1	1A	555	U	O4'-C1'-N1	5.12	112.29	108.20
32	2a	1442	G	N3-C4-C5	-5.12	126.04	128.60
1	1A	2370	G	N1-C6-O6	-5.11	116.83	119.90
1	2A	2873	A	O4'-C1'-N9	5.11	112.29	108.20
1	1A	847	U	C2-N1-C1'	5.11	123.83	117.70
1	1A	1192	G	C5-N7-C8	5.10	106.85	104.30
32	2a	60	A	P-O3'-C3'	5.09	125.81	119.70
1	1A	2063	C	N1-C2-O2	-5.08	115.85	118.90
1	1A	2035	G	O5'-P-OP1	-5.07	101.13	105.70
1	1A	2033	A	OP1-P-OP2	-5.06	112.01	119.60
32	2a	1003	G	C2-N3-C4	5.06	114.43	111.90
1	1A	2689	U	P-O3'-C3'	5.06	125.77	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2593	U	N3-C4-O4	-5.05	115.86	119.40
32	2a	913	A	P-O3'-C3'	5.04	125.75	119.70
1	1A	1653	G	P-O3'-C3'	5.04	125.75	119.70
32	2a	266	G	N3-C4-C5	-5.03	126.08	128.60
1	1A	2685	G	C5-C6-N1	5.02	114.01	111.50
1	1A	668	G	OP2-P-O3'	5.02	116.24	105.20

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	24	62	ARG	Peptide
21	2Z	136	PHE	Peptide

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
3	1D	273/276 (99%)	262 (96%)	11 (4%)	0	100 100
3	2D	273/276 (99%)	261 (96%)	12 (4%)	0	100 100
4	1E	202/206 (98%)	194 (96%)	7 (4%)	1 (0%)	29 32
4	2E	202/206 (98%)	193 (96%)	8 (4%)	1 (0%)	29 32
5	1F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	29 32
5	2F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	29 32
6	1G	179/182 (98%)	161 (90%)	13 (7%)	5 (3%)	5 2
6	2G	179/182 (98%)	161 (90%)	14 (8%)	4 (2%)	6 4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
7	1H	172/180 (96%)	163 (95%)	8 (5%)	1 (1%)	25 27
7	2H	171/180 (95%)	147 (86%)	21 (12%)	3 (2%)	8 6
8	1I	145/148 (98%)	126 (87%)	17 (12%)	2 (1%)	11 9
8	2I	144/148 (97%)	126 (88%)	15 (10%)	3 (2%)	7 4
9	1N	138/140 (99%)	134 (97%)	4 (3%)	0	100 100
9	2N	138/140 (99%)	135 (98%)	2 (1%)	1 (1%)	22 23
10	1O	120/122 (98%)	113 (94%)	6 (5%)	1 (1%)	19 20
10	2O	120/122 (98%)	113 (94%)	7 (6%)	0	100 100
11	1P	147/150 (98%)	139 (95%)	8 (5%)	0	100 100
11	2P	147/150 (98%)	139 (95%)	6 (4%)	2 (1%)	11 9
12	1Q	139/141 (99%)	134 (96%)	4 (3%)	1 (1%)	22 23
12	2Q	139/141 (99%)	131 (94%)	8 (6%)	0	100 100
13	1R	116/118 (98%)	113 (97%)	3 (3%)	0	100 100
13	2R	116/118 (98%)	113 (97%)	3 (3%)	0	100 100
14	1S	108/112 (96%)	101 (94%)	6 (6%)	1 (1%)	17 17
14	2S	108/112 (96%)	100 (93%)	7 (6%)	1 (1%)	17 17
15	1T	129/146 (88%)	122 (95%)	7 (5%)	0	100 100
15	2T	129/146 (88%)	119 (92%)	9 (7%)	1 (1%)	19 20
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	113 (99%)	1 (1%)	0	100 100
17	1V	99/101 (98%)	93 (94%)	5 (5%)	1 (1%)	15 15
17	2V	99/101 (98%)	90 (91%)	8 (8%)	1 (1%)	15 15
18	1W	110/113 (97%)	109 (99%)	1 (1%)	0	100 100
18	2W	110/113 (97%)	109 (99%)	1 (1%)	0	100 100
19	1X	93/96 (97%)	91 (98%)	1 (1%)	1 (1%)	14 13
19	2X	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	14 13
20	1Y	105/110 (96%)	97 (92%)	8 (8%)	0	100 100
20	2Y	105/110 (96%)	97 (92%)	6 (6%)	2 (2%)	8 6
21	1Z	201/206 (98%)	193 (96%)	7 (4%)	1 (0%)	29 32
21	2Z	199/206 (97%)	178 (89%)	20 (10%)	1 (0%)	29 32
22	10	81/85 (95%)	78 (96%)	3 (4%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
22	20	81/85 (95%)	77 (95%)	3 (4%)	1 (1%)	13 11
23	11	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	14 13
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	14 13
24	12	68/72 (94%)	68 (100%)	0	0	100 100
24	22	68/72 (94%)	65 (96%)	2 (3%)	1 (2%)	10 8
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
25	23	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
26	14	67/71 (94%)	53 (79%)	12 (18%)	2 (3%)	4 2
26	24	67/71 (94%)	45 (67%)	20 (30%)	2 (3%)	4 2
27	15	57/60 (95%)	57 (100%)	0	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
29	17	46/49 (94%)	45 (98%)	0	1 (2%)	6 4
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	199 (87%)	23 (10%)	7 (3%)	4 2
33	2b	229/256 (90%)	193 (84%)	28 (12%)	8 (4%)	3 1
34	1c	204/239 (85%)	189 (93%)	15 (7%)	0	100 100
34	2c	204/239 (85%)	180 (88%)	21 (10%)	3 (2%)	10 8
35	1d	206/209 (99%)	192 (93%)	14 (7%)	0	100 100
35	2d	206/209 (99%)	198 (96%)	8 (4%)	0	100 100
36	1e	146/162 (90%)	140 (96%)	6 (4%)	0	100 100
36	2e	146/162 (90%)	144 (99%)	2 (1%)	0	100 100
37	1f	98/101 (97%)	96 (98%)	2 (2%)	0	100 100
37	2f	98/101 (97%)	95 (97%)	3 (3%)	0	100 100
38	1g	153/156 (98%)	147 (96%)	6 (4%)	0	100 100
38	2g	153/156 (98%)	148 (97%)	5 (3%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
39	1h	135/138 (98%)	131 (97%)	4 (3%)	0	100 100
39	2h	135/138 (98%)	133 (98%)	2 (2%)	0	100 100
40	1i	125/128 (98%)	115 (92%)	10 (8%)	0	100 100
40	2i	124/128 (97%)	106 (86%)	16 (13%)	2 (2%)	9 8
41	1j	95/105 (90%)	81 (85%)	7 (7%)	7 (7%)	1 0
41	2j	94/105 (90%)	80 (85%)	11 (12%)	3 (3%)	4 2
42	1k	112/129 (87%)	105 (94%)	7 (6%)	0	100 100
42	2k	112/129 (87%)	103 (92%)	8 (7%)	1 (1%)	17 17
43	1l	119/132 (90%)	111 (93%)	7 (6%)	1 (1%)	19 20
43	2l	119/132 (90%)	106 (89%)	12 (10%)	1 (1%)	19 20
44	1m	114/126 (90%)	105 (92%)	6 (5%)	3 (3%)	5 3
44	2m	112/126 (89%)	98 (88%)	9 (8%)	5 (4%)	2 1
45	1n	58/61 (95%)	57 (98%)	1 (2%)	0	100 100
45	2n	58/61 (95%)	55 (95%)	3 (5%)	0	100 100
46	1o	86/89 (97%)	79 (92%)	6 (7%)	1 (1%)	13 11
46	2o	86/89 (97%)	81 (94%)	4 (5%)	1 (1%)	13 11
47	1p	80/88 (91%)	71 (89%)	9 (11%)	0	100 100
47	2p	80/88 (91%)	74 (92%)	6 (8%)	0	100 100
48	1q	97/105 (92%)	88 (91%)	9 (9%)	0	100 100
48	2q	97/105 (92%)	92 (95%)	5 (5%)	0	100 100
49	1r	66/88 (75%)	62 (94%)	4 (6%)	0	100 100
49	2r	66/88 (75%)	62 (94%)	4 (6%)	0	100 100
50	1s	81/93 (87%)	72 (89%)	9 (11%)	0	100 100
50	2s	81/93 (87%)	69 (85%)	11 (14%)	1 (1%)	13 11
51	1t	94/106 (89%)	90 (96%)	4 (4%)	0	100 100
51	2t	96/106 (91%)	88 (92%)	5 (5%)	3 (3%)	4 2
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100 100
52	2u	21/27 (78%)	17 (81%)	4 (19%)	0	100 100
53	1y	95/113 (84%)	94 (99%)	1 (1%)	0	100 100
53	2y	94/113 (83%)	91 (97%)	3 (3%)	0	100 100
All	All	11641/12354 (94%)	10890 (94%)	657 (6%)	94 (1%)	19 20

All (94) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
6	1G	49	ASP
14	1S	59	LYS
21	1Z	53	ILE
33	1b	21	ARG
33	1b	37	ASN
43	1l	91	LYS
5	2F	130	ALA
6	2G	81	LYS
40	2i	54	ASP
41	2j	55	LYS
41	2j	79	ARG
43	2l	91	LYS
44	2m	67	GLU
46	2o	88	ARG
6	1G	51	ARG
26	14	61	ARG
33	1b	8	LYS
33	1b	17	PHE
33	1b	127	ILE
6	2G	44	GLY
6	2G	47	LYS
6	2G	124	SER
7	2H	126	PRO
17	2V	79	VAL
23	21	3	LYS
24	22	69	ARG
26	24	62	ARG
33	2b	10	LEU
33	2b	17	PHE
33	2b	21	ARG
34	2c	156	ARG
51	2t	100	ILE
6	1G	47	LYS
8	1I	85	GLU
12	1Q	59	ARG
19	1X	94	GLY
26	14	47	GLN
41	1j	55	LYS
44	1m	12	ASN
46	1o	88	ARG
7	2H	65	HIS

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Mol	Chain	Res	Type
8	2I	97	ILE
8	2I	98	ALA
8	2I	117	GLU
9	2N	129	PRO
19	2X	94	GLY
22	20	4	LYS
33	2b	16	HIS
33	2b	20	GLU
33	2b	44	LEU
33	2b	125	PRO
40	2i	91	ASP
42	2k	90	GLY
44	2m	6	GLY
51	2t	95	ALA
4	1E	52	LEU
6	1G	74	LYS
7	1H	92	ILE
10	1O	5	GLN
29	17	47	ARG
41	1j	26	ALA
41	1j	77	PRO
41	1j	79	ARG
41	1j	82	ILE
44	1m	3	ARG
4	2E	52	LEU
11	2P	29	LYS
21	2Z	52	SER
33	2b	126	GLU
41	2j	35	SER
51	2t	47	GLY
8	1I	62	LYS
17	1V	43	GLU
33	1b	10	LEU
33	1b	20	GLU
41	1j	78	ASN
44	1m	11	ARG
34	2c	100	ALA
34	2c	190	ARG
44	2m	23	TYR
44	2m	80	ARG
6	1G	43	LEU
23	11	3	LYS

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Mol	Chain	Res	Type
11	2P	122	PRO
26	24	54	GLY
44	2m	58	GLU
50	2s	29	ARG
14	2S	82	ILE
41	1j	91	PRO
20	2Y	58	GLY
15	2T	37	GLY
20	2Y	81	LYS
7	2H	128	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	214/218 (98%)	198 (92%)	16 (8%)	13 13
3	2D	215/218 (99%)	196 (91%)	19 (9%)	10 8
4	1E	164/166 (99%)	155 (94%)	9 (6%)	21 24
4	2E	164/166 (99%)	157 (96%)	7 (4%)	29 35
5	1F	160/166 (96%)	147 (92%)	13 (8%)	11 11
5	2F	159/166 (96%)	142 (89%)	17 (11%)	6 6
6	1G	144/156 (92%)	135 (94%)	9 (6%)	18 19
6	2G	142/156 (91%)	131 (92%)	11 (8%)	13 12
7	1H	144/148 (97%)	143 (99%)	1 (1%)	84 91
7	2H	143/148 (97%)	129 (90%)	14 (10%)	8 7
8	1I	111/124 (90%)	99 (89%)	12 (11%)	6 6
8	2I	108/124 (87%)	98 (91%)	10 (9%)	9 8
9	1N	119/119 (100%)	114 (96%)	5 (4%)	30 36
9	2N	118/119 (99%)	111 (94%)	7 (6%)	19 22
10	1O	100/100 (100%)	97 (97%)	3 (3%)	41 50
10	2O	100/100 (100%)	96 (96%)	4 (4%)	31 39

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	1P	115/116 (99%)	110 (96%)	5 (4%)	29	35
11	2P	115/116 (99%)	112 (97%)	3 (3%)	46	56
12	1Q	111/111 (100%)	106 (96%)	5 (4%)	27	33
12	2Q	111/111 (100%)	106 (96%)	5 (4%)	27	33
13	1R	101/101 (100%)	99 (98%)	2 (2%)	55	66
13	2R	101/101 (100%)	99 (98%)	2 (2%)	55	66
14	1S	87/88 (99%)	79 (91%)	8 (9%)	9	8
14	2S	85/88 (97%)	79 (93%)	6 (7%)	14	15
15	1T	115/127 (91%)	108 (94%)	7 (6%)	18	20
15	2T	113/127 (89%)	101 (89%)	12 (11%)	6	6
16	1U	93/94 (99%)	88 (95%)	5 (5%)	22	25
16	2U	93/94 (99%)	89 (96%)	4 (4%)	29	35
17	1V	81/82 (99%)	78 (96%)	3 (4%)	34	42
17	2V	80/82 (98%)	70 (88%)	10 (12%)	4	4
18	1W	90/92 (98%)	84 (93%)	6 (7%)	16	17
18	2W	90/92 (98%)	83 (92%)	7 (8%)	12	12
19	1X	77/78 (99%)	74 (96%)	3 (4%)	32	40
19	2X	77/78 (99%)	73 (95%)	4 (5%)	23	27
20	1Y	86/91 (94%)	79 (92%)	7 (8%)	11	11
20	2Y	86/91 (94%)	80 (93%)	6 (7%)	15	15
21	1Z	169/179 (94%)	158 (94%)	11 (6%)	17	18
21	2Z	165/179 (92%)	152 (92%)	13 (8%)	12	12
22	10	65/67 (97%)	64 (98%)	1 (2%)	65	76
22	20	64/67 (96%)	63 (98%)	1 (2%)	62	75
23	11	79/83 (95%)	78 (99%)	1 (1%)	69	80
23	21	81/83 (98%)	77 (95%)	4 (5%)	25	29
24	12	65/67 (97%)	62 (95%)	3 (5%)	27	32
24	22	66/67 (98%)	64 (97%)	2 (3%)	41	50
25	13	51/52 (98%)	49 (96%)	2 (4%)	32	40
25	23	50/52 (96%)	47 (94%)	3 (6%)	19	21
26	14	58/63 (92%)	54 (93%)	4 (7%)	15	15

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
26	24	54/63 (86%)	42 (78%)	12 (22%)	1 0
27	15	51/52 (98%)	48 (94%)	3 (6%)	19 22
27	25	50/52 (96%)	46 (92%)	4 (8%)	12 12
28	16	51/52 (98%)	50 (98%)	1 (2%)	55 66
28	26	50/52 (96%)	47 (94%)	3 (6%)	19 21
29	17	41/42 (98%)	38 (93%)	3 (7%)	14 14
29	27	41/42 (98%)	37 (90%)	4 (10%)	8 7
30	18	54/55 (98%)	51 (94%)	3 (6%)	21 23
30	28	54/55 (98%)	49 (91%)	5 (9%)	9 8
31	19	34/34 (100%)	34 (100%)	0	100 100
31	29	34/34 (100%)	34 (100%)	0	100 100
33	1b	191/220 (87%)	169 (88%)	22 (12%)	5 5
33	2b	187/220 (85%)	167 (89%)	20 (11%)	6 6
34	1c	144/188 (77%)	134 (93%)	10 (7%)	15 15
34	2c	140/188 (74%)	124 (89%)	16 (11%)	5 5
35	1d	171/181 (94%)	157 (92%)	14 (8%)	11 11
35	2d	172/181 (95%)	152 (88%)	20 (12%)	5 5
36	1e	114/123 (93%)	110 (96%)	4 (4%)	36 44
36	2e	114/123 (93%)	110 (96%)	4 (4%)	36 44
37	1f	85/90 (94%)	80 (94%)	5 (6%)	19 22
37	2f	85/90 (94%)	78 (92%)	7 (8%)	11 11
38	1g	120/127 (94%)	115 (96%)	5 (4%)	30 36
38	2g	119/127 (94%)	109 (92%)	10 (8%)	11 10
39	1h	116/119 (98%)	112 (97%)	4 (3%)	37 46
39	2h	114/119 (96%)	105 (92%)	9 (8%)	12 12
40	1i	91/99 (92%)	80 (88%)	11 (12%)	5 4
40	2i	88/99 (89%)	76 (86%)	12 (14%)	3 3
41	1j	68/92 (74%)	57 (84%)	11 (16%)	2 1
41	2j	68/92 (74%)	62 (91%)	6 (9%)	10 8
42	1k	83/99 (84%)	79 (95%)	4 (5%)	25 30
42	2k	83/99 (84%)	75 (90%)	8 (10%)	8 7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
43	1l	96/108 (89%)	93 (97%)	3 (3%)	40 48
43	2l	96/108 (89%)	92 (96%)	4 (4%)	30 36
44	1m	90/101 (89%)	86 (96%)	4 (4%)	28 34
44	2m	87/101 (86%)	76 (87%)	11 (13%)	4 4
45	1n	49/50 (98%)	48 (98%)	1 (2%)	55 66
45	2n	49/50 (98%)	47 (96%)	2 (4%)	30 37
46	1o	78/80 (98%)	78 (100%)	0	100 100
46	2o	78/80 (98%)	75 (96%)	3 (4%)	33 41
47	1p	69/74 (93%)	61 (88%)	8 (12%)	5 5
47	2p	68/74 (92%)	65 (96%)	3 (4%)	28 34
48	1q	94/97 (97%)	91 (97%)	3 (3%)	39 47
48	2q	94/97 (97%)	92 (98%)	2 (2%)	53 65
49	1r	59/77 (77%)	58 (98%)	1 (2%)	60 72
49	2r	59/77 (77%)	56 (95%)	3 (5%)	24 27
50	1s	68/80 (85%)	63 (93%)	5 (7%)	13 14
50	2s	67/80 (84%)	61 (91%)	6 (9%)	9 8
51	1t	71/82 (87%)	69 (97%)	2 (3%)	43 53
51	2t	70/82 (85%)	65 (93%)	5 (7%)	14 15
52	1u	18/22 (82%)	17 (94%)	1 (6%)	21 23
52	2u	18/22 (82%)	17 (94%)	1 (6%)	21 23
53	1y	82/98 (84%)	80 (98%)	2 (2%)	49 59
53	2y	79/98 (81%)	70 (89%)	9 (11%)	5 5
All	All	9531/10260 (93%)	8900 (93%)	631 (7%)	16 17

All (631) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	37	LEU
3	1D	43	ARG
3	1D	71	ASP
3	1D	94	LEU
3	1D	99	ASP
3	1D	111	LEU
3	1D	115	GLN

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Mol	Chain	Res	Type
3	1D	141	VAL
3	1D	155	LEU
3	1D	183	ARG
3	1D	193	VAL
3	1D	211	ARG
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	41	LYS
4	1E	49	LEU
4	1E	75	VAL
4	1E	93	VAL
4	1E	113	PHE
4	1E	116	VAL
4	1E	163	GLU
4	1E	181	LEU
4	1E	184	VAL
5	1F	18	ARG
5	1F	38	ARG
5	1F	53	THR
5	1F	57	VAL
5	1F	60	SER
5	1F	108	LYS
5	1F	110	LEU
5	1F	158	THR
5	1F	162	LEU
5	1F	192	LEU
5	1F	194	MET
5	1F	201	VAL
5	1F	205	ARG
6	1G	7	LEU
6	1G	21	ARG
6	1G	43	LEU
6	1G	45	GLU
6	1G	49	ASP
6	1G	53	LEU
6	1G	79	ASN
6	1G	133	LEU
6	1G	150	ASP
7	1H	101	ARG
8	1I	12	LEU

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Mol	Chain	Res	Type
8	1I	20	ASP
8	1I	40	THR
8	1I	57	ARG
8	1I	60	GLU
8	1I	74	ASN
8	1I	78	THR
8	1I	92	VAL
8	1I	101	LEU
8	1I	109	ILE
8	1I	117	GLU
8	1I	140	LEU
9	1N	8	GLN
9	1N	33	LEU
9	1N	48	MET
9	1N	62	VAL
9	1N	131	GLN
10	1O	66	LYS
10	1O	92	GLU
10	1O	97	ARG
11	1P	2	LYS
11	1P	42	SER
11	1P	75	ILE
11	1P	95	VAL
11	1P	119	GLU
12	1Q	7	MET
12	1Q	18	LYS
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	133	ARG
13	1R	36	THR
13	1R	114	VAL
14	1S	3	ARG
14	1S	17	ARG
14	1S	25	ARG
14	1S	50	SER
14	1S	56	LEU
14	1S	59	LYS
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	49	VAL
15	1T	53	ARG

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Mol	Chain	Res	Type
15	1T	67	SER
15	1T	96	ARG
15	1T	107	ASP
15	1T	118	ARG
16	1U	5	LYS
16	1U	30	LYS
16	1U	31	SER
16	1U	74	LEU
16	1U	104	GLN
17	1V	79	VAL
17	1V	82	ARG
17	1V	95	LEU
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	19	LEU
18	1W	23	LEU
18	1W	100	THR
19	1X	33	LYS
19	1X	35	THR
19	1X	66	LEU
20	1Y	43	ASN
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	73	ARG
20	1Y	92	ASN
20	1Y	99	CYS
20	1Y	107	ASP
21	1Z	31	ARG
21	1Z	86	VAL
21	1Z	102	LEU
21	1Z	118	GLN
21	1Z	126	VAL
21	1Z	132	ASN
21	1Z	142	SER
21	1Z	150	LEU
21	1Z	155	LEU
21	1Z	161	VAL
21	1Z	203	GLU
22	10	59	LEU
23	11	40	ARG
24	12	19	VAL

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Mol	Chain	Res	Type
24	12	30	ARG
24	12	70	GLN
25	13	54	VAL
25	13	58	VAL
26	14	10	VAL
26	14	49	PHE
26	14	56	VAL
26	14	61	ARG
27	15	6	VAL
27	15	40	LYS
27	15	60	VAL
28	16	52	VAL
29	17	43	THR
29	17	46	VAL
29	17	48	LYS
30	18	31	HIS
30	18	32	LEU
30	18	34	TRP
33	1b	10	LEU
33	1b	15	VAL
33	1b	19	HIS
33	1b	39	ILE
33	1b	42	ILE
33	1b	61	LEU
33	1b	93	VAL
33	1b	106	LYS
33	1b	111	ARG
33	1b	113	HIS
33	1b	135	GLN
33	1b	136	VAL
33	1b	144	ARG
33	1b	158	LEU
33	1b	160	ASP
33	1b	163	PHE
33	1b	185	ILE
33	1b	208	ILE
33	1b	219	VAL
33	1b	221	LEU
33	1b	224	GLN
33	1b	230	VAL
34	1c	3	ASN
34	1c	15	THR

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Mol	Chain	Res	Type
34	1c	26	LYS
34	1c	54	ARG
34	1c	70	VAL
34	1c	98	ASN
34	1c	105	GLU
34	1c	115	LEU
34	1c	164	ARG
34	1c	192	THR
35	1d	8	VAL
35	1d	19	LEU
35	1d	25	ARG
35	1d	31	CYS
35	1d	34	GLU
35	1d	85	LYS
35	1d	123	HIS
35	1d	127	THR
35	1d	135	LEU
35	1d	168	ARG
35	1d	178	VAL
35	1d	187	ARG
35	1d	193	ASP
35	1d	194	LEU
36	1e	34	VAL
36	1e	41	VAL
36	1e	56	GLN
36	1e	150	ARG
37	1f	21	LEU
37	1f	40	VAL
37	1f	45	LEU
37	1f	64	GLN
37	1f	86	ARG
38	1g	6	ARG
38	1g	41	ARG
38	1g	56	GLN
38	1g	104	LEU
38	1g	113	GLU
39	1h	26	VAL
39	1h	52	ASP
39	1h	63	LEU
39	1h	77	GLU
40	1i	2	GLU
40	1i	56	LEU

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Mol	Chain	Res	Type
40	1i	60	ASP
40	1i	64	THR
40	1i	65	VAL
40	1i	75	ASP
40	1i	81	ILE
40	1i	92	TYR
40	1i	104	ARG
40	1i	111	ARG
40	1i	113	LYS
41	1j	5	ARG
41	1j	29	ARG
41	1j	38	ILE
41	1j	43	ARG
41	1j	55	LYS
41	1j	65	LEU
41	1j	84	GLN
41	1j	92	THR
41	1j	94	VAL
41	1j	98	ILE
41	1j	100	THR
42	1k	16	SER
42	1k	34	ASP
42	1k	79	SER
42	1k	117	ASN
43	1l	22	SER
43	1l	33	ARG
43	1l	41	ARG
44	1m	4	ILE
44	1m	15	VAL
44	1m	54	VAL
44	1m	70	LEU
45	1n	18	VAL
47	1p	5	ARG
47	1p	20	VAL
47	1p	34	GLU
47	1p	42	ARG
47	1p	61	SER
47	1p	67	THR
47	1p	72	ARG
47	1p	74	LEU
48	1q	85	VAL
48	1q	86	GLU

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Mol	Chain	Res	Type
48	1q	98	LEU
49	1r	42	ARG
50	1s	5	LEU
50	1s	35	SER
50	1s	37	ARG
50	1s	48	THR
50	1s	81	ARG
51	1t	10	LEU
51	1t	15	ARG
52	1u	15	ARG
53	1y	3	MET
53	1y	42	SER
3	2D	3	VAL
3	2D	37	LEU
3	2D	38	LYS
3	2D	71	ASP
3	2D	94	LEU
3	2D	99	ASP
3	2D	113	VAL
3	2D	134	ARG
3	2D	142	VAL
3	2D	155	LEU
3	2D	183	ARG
3	2D	193	VAL
3	2D	211	ARG
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	260	ARG
3	2D	274	ARG
3	2D	276	LYS
4	2E	49	LEU
4	2E	75	VAL
4	2E	87	GLU
4	2E	113	PHE
4	2E	116	VAL
4	2E	181	LEU
4	2E	188	VAL
5	2F	17	ARG
5	2F	20	LEU
5	2F	33	LEU
5	2F	57	VAL

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Mol	Chain	Res	Type
5	2F	95	ARG
5	2F	132	VAL
5	2F	133	ASN
5	2F	140	LEU
5	2F	157	VAL
5	2F	158	THR
5	2F	161	GLU
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	197	ASP
5	2F	200	GLU
5	2F	201	VAL
6	2G	5	VAL
6	2G	28	VAL
6	2G	43	LEU
6	2G	53	LEU
6	2G	58	GLN
6	2G	86	MET
6	2G	88	ILE
6	2G	113	ARG
6	2G	133	LEU
6	2G	139	LEU
6	2G	140	ILE
7	2H	18	GLU
7	2H	32	GLU
7	2H	43	VAL
7	2H	44	VAL
7	2H	45	VAL
7	2H	50	VAL
7	2H	59	ARG
7	2H	65	HIS
7	2H	68	THR
7	2H	71	LEU
7	2H	85	LYS
7	2H	88	LEU
7	2H	133	VAL
7	2H	152	ARG
8	2I	38	LEU
8	2I	54	GLN
8	2I	66	GLU
8	2I	69	LYS

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Mol	Chain	Res	Type
8	2I	74	ASN
8	2I	76	THR
8	2I	87	LYS
8	2I	92	VAL
8	2I	116	LEU
8	2I	142	VAL
9	2N	9	VAL
9	2N	12	ARG
9	2N	28	THR
9	2N	48	MET
9	2N	99	LEU
9	2N	138	LEU
9	2N	140	VAL
10	2O	1	MET
10	2O	28	SER
10	2O	108	GLU
10	2O	116	SER
11	2P	96	THR
11	2P	119	GLU
11	2P	149	GLU
12	2Q	1	MET
12	2Q	75	THR
12	2Q	98	LYS
12	2Q	109	VAL
12	2Q	133	ARG
13	2R	36	THR
13	2R	114	VAL
14	2S	12	PHE
14	2S	25	ARG
14	2S	35	ILE
14	2S	48	LEU
14	2S	78	LEU
14	2S	85	VAL
15	2T	6	LEU
15	2T	28	VAL
15	2T	36	GLU
15	2T	38	ASN
15	2T	53	ARG
15	2T	65	LYS
15	2T	82	LEU
15	2T	89	VAL
15	2T	96	ARG

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Mol	Chain	Res	Type
15	2T	108	ARG
15	2T	111	ARG
15	2T	118	ARG
16	2U	5	LYS
16	2U	31	SER
16	2U	74	LEU
16	2U	104	GLN
17	2V	13	ARG
17	2V	19	LYS
17	2V	35	LEU
17	2V	46	VAL
17	2V	51	VAL
17	2V	62	LEU
17	2V	79	VAL
17	2V	82	ARG
17	2V	96	ILE
17	2V	100	ARG
18	2W	1	MET
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	19	LEU
18	2W	23	LEU
18	2W	100	THR
19	2X	23	GLU
19	2X	45	THR
19	2X	66	LEU
19	2X	82	GLN
20	2Y	6	HIS
20	2Y	9	LYS
20	2Y	50	ARG
20	2Y	96	ILE
20	2Y	99	CYS
20	2Y	107	ASP
21	2Z	5	LEU
21	2Z	18	LEU
21	2Z	33	LEU
21	2Z	65	GLN
21	2Z	71	VAL
21	2Z	72	ARG
21	2Z	94	GLU
21	2Z	121	HIS

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Mol	Chain	Res	Type
21	2Z	126	VAL
21	2Z	170	THR
21	2Z	182	LYS
21	2Z	191	VAL
21	2Z	201	LYS
22	20	10	THR
23	21	4	VAL
23	21	21	ARG
23	21	40	ARG
23	21	83	GLU
24	22	8	LYS
24	22	53	LEU
25	23	23	LEU
25	23	31	LEU
25	23	54	VAL
26	24	3	GLU
26	24	9	LEU
26	24	15	ILE
26	24	21	VAL
26	24	23	GLU
26	24	34	GLU
26	24	40	HIS
26	24	46	GLN
26	24	52	THR
26	24	58	ARG
26	24	60	GLN
26	24	63	TYR
27	25	6	VAL
27	25	40	LYS
27	25	55	ARG
27	25	58	LEU
28	26	5	VAL
28	26	6	ARG
28	26	48	VAL
29	27	41	ARG
29	27	43	THR
29	27	46	VAL
29	27	47	ARG
30	28	14	VAL
30	28	31	HIS
30	28	32	LEU
30	28	34	TRP

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Mol	Chain	Res	Type
30	28	46	ARG
33	2b	8	LYS
33	2b	11	LEU
33	2b	12	GLU
33	2b	15	VAL
33	2b	17	PHE
33	2b	24	TRP
33	2b	42	ILE
33	2b	44	LEU
33	2b	52	GLU
33	2b	55	PHE
33	2b	71	VAL
33	2b	96	ARG
33	2b	97	TRP
33	2b	111	ARG
33	2b	114	ARG
33	2b	133	LYS
33	2b	187	LEU
33	2b	189	ASP
33	2b	222	ILE
33	2b	229	VAL
34	2c	15	THR
34	2c	21	ARG
34	2c	28	GLN
34	2c	33	LEU
34	2c	52	LEU
34	2c	55	VAL
34	2c	105	GLU
34	2c	108	ASN
34	2c	115	LEU
34	2c	128	PHE
34	2c	152	ILE
34	2c	164	ARG
34	2c	166	GLU
34	2c	181	ASN
34	2c	206	GLU
34	2c	207	VAL
35	2d	3	ARG
35	2d	8	VAL
35	2d	13	ARG
35	2d	17	VAL
35	2d	59	ARG

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Mol	Chain	Res	Type
35	2d	83	SER
35	2d	96	LEU
35	2d	108	LEU
35	2d	110	PHE
35	2d	112	VAL
35	2d	122	ARG
35	2d	135	LEU
35	2d	141	ARG
35	2d	150	GLU
35	2d	157	LEU
35	2d	160	GLN
35	2d	170	VAL
35	2d	175	SER
35	2d	188	LEU
35	2d	194	LEU
36	2e	8	GLU
36	2e	12	LEU
36	2e	31	LEU
36	2e	41	VAL
37	2f	22	GLU
37	2f	37	VAL
37	2f	61	LEU
37	2f	69	GLU
37	2f	73	ASN
37	2f	89	MET
37	2f	93	SER
38	2g	6	ARG
38	2g	12	LEU
38	2g	15	ASP
38	2g	27	ILE
38	2g	50	ILE
38	2g	75	VAL
38	2g	92	SER
38	2g	115	ARG
38	2g	135	VAL
38	2g	155	ARG
39	2h	21	LYS
39	2h	39	LEU
39	2h	60	ARG
39	2h	83	ILE
39	2h	84	ARG
39	2h	85	ARG

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Mol	Chain	Res	Type
39	2h	112	LEU
39	2h	125	ARG
39	2h	133	LEU
40	2i	17	VAL
40	2i	28	VAL
40	2i	33	PHE
40	2i	47	LEU
40	2i	56	LEU
40	2i	60	ASP
40	2i	85	LEU
40	2i	87	GLN
40	2i	92	TYR
40	2i	102	LEU
40	2i	104	ARG
40	2i	121	ARG
41	2j	16	LEU
41	2j	30	SER
41	2j	34	VAL
41	2j	38	ILE
41	2j	84	GLN
41	2j	98	ILE
42	2k	28	THR
42	2k	41	THR
42	2k	48	ILE
42	2k	70	LYS
42	2k	84	VAL
42	2k	109	VAL
42	2k	116	HIS
42	2k	117	ASN
43	2l	33	ARG
43	2l	41	ARG
43	2l	81	SER
43	2l	89	ARG
44	2m	3	ARG
44	2m	47	ASP
44	2m	49	THR
44	2m	62	ASN
44	2m	65	LYS
44	2m	69	GLU
44	2m	81	LEU
44	2m	86	CYS
44	2m	96	LEU

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Mol	Chain	Res	Type
44	2m	98	VAL
44	2m	102	ARG
45	2n	18	VAL
45	2n	33	VAL
46	2o	3	ILE
46	2o	25	THR
46	2o	35	ARG
47	2p	20	VAL
47	2p	60	LEU
47	2p	71	ARG
48	2q	93	GLN
48	2q	99	SER
49	2r	45	SER
49	2r	66	LEU
49	2r	84	LYS
50	2s	13	ASP
50	2s	30	LEU
50	2s	33	THR
50	2s	64	GLU
50	2s	71	LEU
50	2s	77	THR
51	2t	11	SER
51	2t	24	LEU
51	2t	37	SER
51	2t	42	GLN
51	2t	99	LEU
52	2u	15	ARG
53	2y	3	MET
53	2y	5	ILE
53	2y	11	GLU
53	2y	13	THR
53	2y	16	ILE
53	2y	24	LEU
53	2y	29	LYS
53	2y	46	GLN
53	2y	96	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (131) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	253	GLN

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Mol	Chain	Res	Type
4	1E	48	GLN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
8	1I	43	ASN
9	1N	133	GLN
15	1T	58	ASN
15	1T	79	HIS
15	1T	123	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	73	GLN
21	1Z	151	HIS
22	10	35	ASN
23	11	56	GLN
25	13	32	GLN
26	14	47	GLN
33	1b	135	GLN
34	1c	6	HIS
34	1c	37	GLN
34	1c	63	ASN
34	1c	104	GLN
34	1c	110	ASN
35	1d	45	GLN
35	1d	77	ASN
35	1d	119	GLN
35	1d	123	HIS
35	1d	129	ASN
35	1d	201	GLN
36	1e	56	GLN
37	1f	64	GLN
37	1f	73	ASN
37	1f	84	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	56	GLN
38	1g	64	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	87	GLN

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Mol	Chain	Res	Type
41	1j	56	HIS
41	1j	84	GLN
42	1k	78	GLN
43	1l	99	HIS
44	1m	92	HIS
45	1n	49	HIS
46	1o	62	GLN
47	1p	16	HIS
48	1q	45	HIS
50	1s	56	GLN
50	1s	69	HIS
50	1s	83	HIS
51	1t	18	GLN
53	1y	4	ASN
53	1y	9	GLN
53	1y	38	HIS
3	2D	87	ASN
3	2D	164	GLN
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	75	HIS
6	2G	58	GLN
6	2G	108	ASN
8	2I	43	ASN
8	2I	54	GLN
8	2I	74	ASN
8	2I	133	HIS
10	2O	3	GLN
15	2T	58	ASN
16	2U	94	ASN
17	2V	64	HIS
19	2X	31	HIS
19	2X	82	GLN
20	2Y	92	ASN
21	2Z	73	GLN
21	2Z	132	ASN
25	23	32	GLN
26	24	40	HIS
26	24	46	GLN
26	24	60	GLN
29	27	36	GLN

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Mol	Chain	Res	Type
33	2b	19	HIS
33	2b	40	HIS
33	2b	146	GLN
33	2b	212	GLN
34	2c	37	GLN
34	2c	98	ASN
34	2c	102	ASN
34	2c	108	ASN
34	2c	123	GLN
34	2c	136	GLN
34	2c	162	GLN
34	2c	176	HIS
34	2c	181	ASN
35	2d	77	ASN
35	2d	116	GLN
35	2d	119	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
35	2d	161	ASN
36	2e	65	ASN
37	2f	73	ASN
37	2f	100	ASN
38	2g	13	GLN
38	2g	28	ASN
38	2g	106	GLN
40	2i	3	GLN
40	2i	58	HIS
42	2k	62	GLN
42	2k	117	ASN
43	2l	99	HIS
44	2m	62	ASN
44	2m	77	ASN
47	2p	14	ASN
47	2p	16	HIS
48	2q	16	GLN
48	2q	93	GLN
50	2s	57	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	18	GLN
51	2t	42	GLN

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Mol	Chain	Res	Type
53	2y	31	GLN
53	2y	33	HIS
53	2y	38	HIS

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	389 (13%)	34 (1%)
1	2A	2858/2915 (98%)	443 (15%)	34 (1%)
2	1B	119/121 (98%)	10 (8%)	0
2	2B	119/121 (98%)	13 (10%)	0
32	1a	1494/1521 (98%)	217 (14%)	0
32	2a	1498/1521 (98%)	247 (16%)	0
All	All	8952/9114 (98%)	1319 (14%)	68 (0%)

All (1319) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	34	C
1	1A	45	C
1	1A	63	U
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	154(A)	C
1	1A	181	A
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	229	A
1	1A	248	G
1	1A	265	A
1	1A	271(I)	G

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Mol	Chain	Res	Type
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(J)	C
1	1A	275	G
1	1A	279	C
1	1A	280	C
1	1A	311	A
1	1A	330	A
1	1A	352	G
1	1A	363	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	407	G
1	1A	411	G
1	1A	412	A
1	1A	421	U
1	1A	428	A
1	1A	448	U
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	494	G
1	1A	505	A
1	1A	508	G
1	1A	509	C
1	1A	528	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A

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Mol	Chain	Res	Type
1	1A	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	652(V)	C
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	886	C
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	896	A
1	1A	897	C
1	1A	907	U
1	1A	910	A

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Mol	Chain	Res	Type
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1033	U
1	1A	1039	G
1	1A	1042	G
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1058	G
1	1A	1061	U
1	1A	1062	G
1	1A	1063	G
1	1A	1065	U
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1072	C
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1096	A

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Mol	Chain	Res	Type
1	1A	1097	U
1	1A	1098	A
1	1A	1101	U
1	1A	1112	G
1	1A	1116	C
1	1A	1128	A
1	1A	1135	C
1	1A	1136	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1210	A
1	1A	1211	U
1	1A	1218	C
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G

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Mol	Chain	Res	Type
1	1A	1455	G
1	1A	1459	G
1	1A	1467	C
1	1A	1471	A
1	1A	1482	G
1	1A	1493	C
1	1A	1497	U
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1525	G
1	1A	1542	A
1	1A	1543	C
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C
1	1A	1654	A
1	1A	1664	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1722	A
1	1A	1739	U
1	1A	1747	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C

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Mol	Chain	Res	Type
1	1A	1801	G
1	1A	1816	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2099	U
1	1A	2103	C
1	1A	2105	C
1	1A	2107	C
1	1A	2108	C
1	1A	2110	G
1	1A	2111	C

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Mol	Chain	Res	Type
1	1A	2116	G
1	1A	2117	A
1	1A	2119	A
1	1A	2123	G
1	1A	2126	A
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2137	C
1	1A	2142	C
1	1A	2146	C
1	1A	2147	G
1	1A	2148	G
1	1A	2158	A
1	1A	2159	G
1	1A	2160	G
1	1A	2166	G
1	1A	2173	A
1	1A	2176	A
1	1A	2178	C
1	1A	2186	G
1	1A	2187	G
1	1A	2188	C
1	1A	2190	G
1	1A	2191	G
1	1A	2192	G
1	1A	2193	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2279	G
1	1A	2280	G

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Mol	Chain	Res	Type
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2383	G
1	1A	2385	C
1	1A	2393	A
1	1A	2406	U
1	1A	2422	A
1	1A	2423	U
1	1A	2424	C
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2434	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2469	A
1	1A	2476	A
1	1A	2478	A
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2603	G
1	1A	2609	U

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Mol	Chain	Res	Type
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2682	U
1	1A	2689	U
1	1A	2690	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2758	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2789	C
1	1A	2790	A
1	1A	2791	C
1	1A	2794	C
1	1A	2802	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2894	G
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	42	C
2	1B	45	A
2	1B	56	G
2	1B	73	A
2	1B	84	C
2	1B	110	G
2	1B	120	A
32	1a	9	G
32	1a	32	A

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Mol	Chain	Res	Type
32	1a	39	G
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	69	G
32	1a	78	G
32	1a	79	G
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	151	A
32	1a	163	C
32	1a	171	A
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(F)	U
32	1a	195	A
32	1a	197	A
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	332	G
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	356	A
32	1a	367	U

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Mol	Chain	Res	Type
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	423	G
32	1a	429	U
32	1a	439	A
32	1a	441	A
32	1a	452	A
32	1a	456	C
32	1a	458	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	476	G
32	1a	480	U
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	532	A
32	1a	547	A
32	1a	558	G
32	1a	559	A
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	618	C
32	1a	619	U
32	1a	630	G
32	1a	632	A

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Mol	Chain	Res	Type
32	1a	642	A
32	1a	653	A
32	1a	657	G
32	1a	661	G
32	1a	665	A
32	1a	688	G
32	1a	723	U
32	1a	731	G
32	1a	755	G
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	829	G
32	1a	836	G
32	1a	840	C
32	1a	841	U
32	1a	848	C
32	1a	851	G
32	1a	874	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	998	G
32	1a	999	C
32	1a	1001	A
32	1a	1001(A)	G

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Mol	Chain	Res	Type
32	1a	1003	G
32	1a	1004	A
32	1a	1005	A
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(B)	C
32	1a	1030(D)	A
32	1a	1032	G
32	1a	1036	G
32	1a	1037	C
32	1a	1038	C
32	1a	1040	U
32	1a	1042	G
32	1a	1065	U
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1104	G
32	1a	1124	G
32	1a	1126	U
32	1a	1130	A
32	1a	1132	C
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1159	U
32	1a	1163	C
32	1a	1168	A
32	1a	1183	A
32	1a	1184	G

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Mol	Chain	Res	Type
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1370	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1492	A
32	1a	1493	A
32	1a	1497	G
32	1a	1499	A
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U

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Mol	Chain	Res	Type
32	1a	1517	G
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	11	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	92	A
1	2A	95	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	131	G
1	2A	141	A
1	2A	149	A
1	2A	157	U
1	2A	181	A
1	2A	182	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	271(K)	U

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Mol	Chain	Res	Type
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(A)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	311	A
1	2A	324	A
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	342	G
1	2A	352	G
1	2A	363	G
1	2A	370	G
1	2A	380	U
1	2A	386	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	412	A
1	2A	428	A
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	470	A
1	2A	481	G
1	2A	504	U
1	2A	505	A
1	2A	509	C
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	551	G
1	2A	563	G
1	2A	573	G

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Mol	Chain	Res	Type
1	2A	575	A
1	2A	586	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	653	A
1	2A	686	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	764	A
1	2A	765	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	827	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	880	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C

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Mol	Chain	Res	Type
1	2A	890	A
1	2A	896	A
1	2A	897	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	963	U
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	1012	U
1	2A	1013	C
1	2A	1033	U
1	2A	1044	G
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1048	A
1	2A	1052	C
1	2A	1054	A
1	2A	1055	G
1	2A	1059	G
1	2A	1060	U
1	2A	1063	G
1	2A	1064	C
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
1	2A	1070	A
1	2A	1071	G
1	2A	1072	C
1	2A	1073	A
1	2A	1076	C
1	2A	1077	A

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Mol	Chain	Res	Type
1	2A	1078	U
1	2A	1079	C
1	2A	1080	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1094	U
1	2A	1096	A
1	2A	1097	U
1	2A	1098	A
1	2A	1111	A
1	2A	1112	G
1	2A	1116	C
1	2A	1117	G
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1171	G
1	2A	1179	C
1	2A	1211	U
1	2A	1220	A
1	2A	1236	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1306	C
1	2A	1314	C
1	2A	1319	G
1	2A	1345	C
1	2A	1352	U

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Mol	Chain	Res	Type
1	2A	1359	A
1	2A	1365	A
1	2A	1368	G
1	2A	1372	U
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1395	A
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1428	C
1	2A	1445	A
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1493	C
1	2A	1494	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1542	A
1	2A	1543	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1584	C
1	2A	1586	A
1	2A	1595	G
1	2A	1608	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1674	G

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Mol	Chain	Res	Type
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1746	G
1	2A	1756	G
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1829	A
1	2A	1847	A
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1937	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1984	G
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G

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Mol	Chain	Res	Type
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2098	U
1	2A	2103	C
1	2A	2104	G
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G
1	2A	2117	A
1	2A	2119	A
1	2A	2121	G
1	2A	2123	G
1	2A	2126	A
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2137	C
1	2A	2140	C
1	2A	2141	G
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2150	U
1	2A	2151	G
1	2A	2155	G

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Mol	Chain	Res	Type
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2163	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2172	U
1	2A	2173	A
1	2A	2174	C
1	2A	2175	C
1	2A	2178	C
1	2A	2182	G
1	2A	2183	C
1	2A	2186	G
1	2A	2187	G
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2219	G
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2268	A
1	2A	2269	A
1	2A	2275	C
1	2A	2279	G
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2320	A
1	2A	2322	A
1	2A	2325	G

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Mol	Chain	Res	Type
1	2A	2326	C
1	2A	2334	G
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2406	U
1	2A	2410	G
1	2A	2422	A
1	2A	2423	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2448	A
1	2A	2468	G
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2518	A
1	2A	2525	G
1	2A	2529	G
1	2A	2554	U
1	2A	2555	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2603	G
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2630	G

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Mol	Chain	Res	Type
1	2A	2654	A
1	2A	2663	G
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2757	A
1	2A	2758	A
1	2A	2765	A
1	2A	2778	A
1	2A	2779	U
1	2A	2789	C
1	2A	2802	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2872	G
1	2A	2880	C
1	2A	2894	G
1	2A	2896	C
1	2A	2897	U
2	2B	2	C
2	2B	7	G
2	2B	9	G
2	2B	12	C
2	2B	13	A
2	2B	25	A
2	2B	42	C
2	2B	45	A
2	2B	51	G
2	2B	56	G
2	2B	73	A
2	2B	84	C
2	2B	110	G
32	2a	5	U

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Mol	Chain	Res	Type
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	61	G
32	2a	80	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	102	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	144	G
32	2a	156	G
32	2a	163	C
32	2a	174	C
32	2a	182	U
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	220	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	316	G
32	2a	319	G
32	2a	321	A
32	2a	328	C
32	2a	332	G

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Mol	Chain	Res	Type
32	2a	350	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	476	G
32	2a	482	A
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	521	G
32	2a	532	A
32	2a	533	A
32	2a	536	C
32	2a	547	A
32	2a	559	A
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A

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Mol	Chain	Res	Type
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	630	G
32	2a	631	G
32	2a	633	G
32	2a	653	A
32	2a	665	A
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	702	A
32	2a	723	U
32	2a	731	G
32	2a	749	C
32	2a	753	A
32	2a	755	G
32	2a	760	G
32	2a	774	G
32	2a	777	A
32	2a	787	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	829	G
32	2a	836	G
32	2a	840	C
32	2a	841	U
32	2a	848	C
32	2a	851	G
32	2a	855	G
32	2a	859	A
32	2a	872	A
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	931	C

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Mol	Chain	Res	Type
32	2a	934	C
32	2a	960	U
32	2a	961	U
32	2a	965	A
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	996	A
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1010	G
32	2a	1020	U
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1030(C)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1040	U
32	2a	1041	A
32	2a	1043	C
32	2a	1047	G
32	2a	1053	G
32	2a	1054	C
32	2a	1055	A

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Mol	Chain	Res	Type
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1113	C
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1135	U
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1213	A
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1270	C
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A

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Mol	Chain	Res	Type
32	2a	1281	U
32	2a	1282	C
32	2a	1287	A
32	2a	1297	C
32	2a	1299	A
32	2a	1300	G
32	2a	1303	C
32	2a	1305	G
32	2a	1317	C
32	2a	1319	A
32	2a	1320	C
32	2a	1338	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1442(B)	A
32	2a	1446	U
32	2a	1447	A
32	2a	1456	G
32	2a	1492	A
32	2a	1497	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1505	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G

All (68) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G

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Mol	Chain	Res	Type
1	1A	271(K)	U
1	1A	278	A
1	1A	573	G
1	1A	627	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	840	C
1	1A	888	C
1	1A	895	U
1	1A	974	G
1	1A	1047	G
1	1A	1073	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1379	A
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	2126	A
1	1A	2406	U
1	1A	2422	A
1	1A	2439	A
1	1A	2602	A
1	1A	2611	U
1	1A	2689	U
1	1A	2756	U
1	1A	2893	G
1	2A	195	A
1	2A	196	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	746	A
1	2A	752	A
1	2A	764	A
1	2A	774	A

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Mol	Chain	Res	Type
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	974	G
1	2A	1047	G
1	2A	1051	G
1	2A	1053	C
1	2A	1062	G
1	2A	1065	U
1	2A	1067	A
1	2A	1076	C
1	2A	1210	A
1	2A	1395	A
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1992	G
1	2A	2171	A
1	2A	2172	U
1	2A	2406	U
1	2A	2439	A
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

5.4 Non-standard residues in protein, DNA, RNA chains (i)

48 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	OMC	1A	1920	1	19,22,23	0.82	0	26,31,34	0.97	1 (3%)
32	5MC	1a	1407	32	18,22,23	0.98	2 (11%)	26,32,35	1.15	4 (15%)
1	5MU	1A	1915	1	19,22,23	1.44	4 (21%)	28,32,35	2.33	9 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	5MC	1a	967	32	18,22,23	0.96	2 (11%)	26,32,35	1.10	2 (7%)
1	5MC	1A	1962	1	18,22,23	0.98	2 (11%)	26,32,35	1.14	4 (15%)
32	5MC	2a	967	32	18,22,23	1.00	2 (11%)	26,32,35	1.11	2 (7%)
32	5MC	2a	1400	32	18,22,23	0.98	2 (11%)	26,32,35	1.20	2 (7%)
32	MA6	2a	1519	32	18,26,27	0.79	0	19,38,41	1.52	2 (10%)
32	5MC	1a	1404	32	18,22,23	0.94	2 (11%)	26,32,35	1.08	3 (11%)
1	5MU	2A	1915	1	19,22,23	1.44	4 (21%)	28,32,35	2.17	9 (32%)
1	5MU	2A	1939	54,1	19,22,23	1.40	6 (31%)	28,32,35	2.21	6 (21%)
32	M2G	2a	966	32	20,27,28	1.42	2 (10%)	22,40,43	0.98	2 (9%)
1	2MA	1A	2503	54,1	17,25,26	0.97	1 (5%)	17,37,40	1.09	2 (11%)
32	M2G	1a	966	32	20,27,28	1.41	3 (15%)	22,40,43	0.92	2 (9%)
32	4OC	2a	1402	32	20,23,24	0.77	0	26,32,35	0.93	1 (3%)
32	MA6	2a	1518	32	18,26,27	0.77	0	19,38,41	1.37	2 (10%)
32	5MC	1a	1400	32	18,22,23	1.00	2 (11%)	26,32,35	1.19	3 (11%)
32	UR3	2a	1498	32	19,22,23	1.00	1 (5%)	26,32,35	1.42	1 (3%)
1	PSU	1A	1917	1	18,21,22	1.32	2 (11%)	22,30,33	1.75	4 (18%)
1	PSU	1A	1911	1	18,21,22	1.35	2 (11%)	22,30,33	1.83	4 (18%)
43	0TD	1l	92	43	7,9,10	4.80	2 (28%)	6,11,13	4.24	2 (33%)
1	OMU	1A	2552	54,1	19,22,23	1.19	3 (15%)	26,31,34	1.70	5 (19%)
1	PSU	2A	1917	1	18,21,22	1.29	2 (11%)	22,30,33	1.87	3 (13%)
1	OMG	2A	2251	54,1	18,26,27	0.92	1 (5%)	19,38,41	1.15	3 (15%)
32	2MG	2a	1207	32	18,26,27	0.92	1 (5%)	16,38,41	1.01	1 (6%)
32	G7M	2a	527	32	20,26,27	1.21	2 (10%)	17,39,42	0.58	0
1	PSU	2A	2605	1	18,21,22	1.30	3 (16%)	22,30,33	1.78	4 (18%)
32	PSU	2a	516	32,54	18,21,22	1.32	2 (11%)	22,30,33	1.92	5 (22%)
1	OMU	2A	2552	54,1	19,22,23	1.13	2 (10%)	26,31,34	1.78	6 (23%)
1	5MU	1A	1939	54,1	19,22,23	1.46	5 (26%)	28,32,35	2.12	6 (21%)
32	G7M	1a	527	32,54	20,26,27	1.16	2 (10%)	17,39,42	0.58	0
1	OMC	2A	1920	1	19,22,23	0.82	0	26,31,34	0.88	1 (3%)
32	MA6	1a	1519	32	18,26,27	0.78	0	19,38,41	1.37	2 (10%)
32	PSU	1a	516	32,54	18,21,22	1.33	2 (11%)	22,30,33	1.74	4 (18%)
1	5MC	2A	1962	54,1	18,22,23	0.93	2 (11%)	26,32,35	1.15	1 (3%)
1	PSU	1A	2605	1	18,21,22	1.35	2 (11%)	22,30,33	1.81	3 (13%)
1	5MC	1A	1942	54,1	18,22,23	0.96	2 (11%)	26,32,35	1.12	3 (11%)
32	4OC	1a	1402	32	20,23,24	0.74	1 (5%)	26,32,35	1.00	1 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	UR3	1a	1498	32	19,22,23	1.02	0	26,32,35	1.55	3 (11%)
1	5MC	2A	1942	54,1	18,22,23	0.99	2 (11%)	26,32,35	1.26	2 (7%)
32	MA6	1a	1518	32	18,26,27	0.80	0	19,38,41	1.31	2 (10%)
1	2MA	2A	2503	54,1	17,25,26	0.99	1 (5%)	17,37,40	1.04	2 (11%)
32	5MC	2a	1404	32	18,22,23	1.02	2 (11%)	26,32,35	1.15	2 (7%)
43	0TD	2l	92	43	7,9,10	4.56	1 (14%)	6,11,13	3.94	2 (33%)
1	PSU	2A	1911	1	18,21,22	1.40	3 (16%)	22,30,33	1.85	3 (13%)
32	2MG	1a	1207	32	18,26,27	0.94	1 (5%)	16,38,41	1.23	3 (18%)
32	5MC	2a	1407	32	18,22,23	0.99	2 (11%)	26,32,35	1.15	3 (11%)
1	OMG	1A	2251	54,1	18,26,27	1.14	1 (5%)	19,38,41	1.05	2 (10%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	2/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	2/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MU	2A	1939	54,1	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
1	2MA	1A	2503	54,1	-	2/3/25/26	0/3/3/3
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	4OC	2a	1402	32	-	3/9/29/30	0/2/2/2
32	MA6	2a	1518	32	-	1/7/29/30	0/3/3/3
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
1	OMU	1A	2552	54,1	-	0/9/27/28	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	54,1	-	0/5/27/28	0/3/3/3
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
32	G7M	2a	527	32	-	0/3/25/26	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32,54	-	2/7/25/26	0/2/2/2
1	OMU	2A	2552	54,1	-	0/9/27/28	0/2/2/2
1	5MU	1A	1939	54,1	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32,54	-	3/3/25/26	0/3/3/3
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	MA6	1a	1519	32	-	2/7/29/30	0/3/3/3
32	PSU	1a	516	32,54	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	54,1	-	1/7/25/26	0/2/2/2
1	PSU	1A	2605	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	54,1	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	54,1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
1	2MA	2A	2503	54,1	-	1/3/25/26	0/3/3/3
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	3/7/12/14	-
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/5/27/28	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	54,1	-	0/5/27/28	0/3/3/3

All (86) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.27	1.69	1.82
43	2l	92	0TD	CB-SB	-11.73	1.70	1.82
32	2a	966	M2G	C2-N3	4.55	1.36	1.30
32	1a	966	M2G	C2-N3	4.34	1.36	1.30
32	1a	527	G7M	C5-C4	3.58	1.46	1.39
1	1A	2251	OMG	C6-N1	-3.54	1.32	1.37
32	2a	527	G7M	C5-C4	3.47	1.46	1.39
1	2A	1911	PSU	C6-C5	3.46	1.39	1.35
32	1a	516	PSU	C6-C5	3.40	1.39	1.35
1	1A	1917	PSU	C6-C5	3.35	1.39	1.35
1	1A	1911	PSU	C6-C5	3.18	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1915	5MU	C6-C5	3.12	1.39	1.34
1	2A	1915	5MU	C2-N1	3.11	1.43	1.38
32	2a	516	PSU	C6-C5	3.08	1.38	1.35
1	1A	1915	5MU	C2-N1	3.06	1.43	1.38
1	1A	2605	PSU	C6-C5	3.05	1.38	1.35
32	2a	967	5MC	C6-C5	3.03	1.39	1.34
1	2A	1917	PSU	C6-C5	2.97	1.38	1.35
32	2a	1407	5MC	C6-C5	2.97	1.39	1.34
32	2a	1404	5MC	C6-C5	2.95	1.39	1.34
1	1A	1939	5MU	C6-C5	2.92	1.39	1.34
32	1a	1407	5MC	C6-C5	2.91	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.90	1.33	1.38
1	1A	1942	5MC	C6-C5	2.89	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.81	1.33	1.38
32	1a	1400	5MC	C6-C5	2.79	1.39	1.34
32	2a	966	M2G	C2-N2	2.79	1.40	1.35
1	2A	2605	PSU	C6-C5	2.78	1.38	1.35
1	2A	1939	5MU	C6-C5	2.78	1.39	1.34
32	1a	967	5MC	C6-C5	2.76	1.39	1.34
1	2A	2605	PSU	C4-N3	-2.75	1.33	1.38
32	1a	966	M2G	C6-N1	-2.75	1.33	1.37
1	2A	1962	5MC	C6-C5	2.74	1.39	1.34
32	2a	1400	5MC	C6-C5	2.72	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.71	1.33	1.38
1	2A	1942	5MC	C6-C5	2.70	1.39	1.34
32	1a	1404	5MC	C6-C5	2.70	1.39	1.34
1	1A	1962	5MC	C6-N1	-2.69	1.33	1.38
1	1A	2552	OMU	C4-N3	-2.66	1.33	1.38
1	1A	1939	5MU	C6-N1	-2.62	1.33	1.38
1	1A	1939	5MU	C4-N3	-2.62	1.34	1.38
1	1A	1915	5MU	C4-N3	-2.57	1.34	1.38
32	2a	516	PSU	C4-N3	-2.56	1.34	1.38
1	1A	1915	5MU	C6-C5	2.55	1.38	1.34
32	1a	966	M2G	C2-N2	2.51	1.39	1.35
1	1A	1911	PSU	C4-N3	-2.49	1.34	1.38
1	1A	1962	5MC	C6-C5	2.46	1.38	1.34
32	1a	1400	5MC	C6-N1	-2.46	1.33	1.38
1	1A	1939	5MU	C2-N3	-2.46	1.33	1.38
1	1A	1917	PSU	C4-N3	-2.45	1.34	1.38
32	2a	527	G7M	C6-N1	-2.44	1.34	1.37
1	2A	1915	5MU	C4-N3	-2.44	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.44	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2251	OMG	C6-N1	-2.41	1.34	1.37
1	2A	1942	5MC	C6-N1	-2.38	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.35	1.34	1.37
32	1a	516	PSU	C4-N3	-2.34	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.31	1.33	1.37
1	2A	2552	OMU	C4-N3	-2.29	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.27	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.22	1.34	1.38
32	2a	1498	UR3	C6-C5	2.21	1.40	1.35
1	1A	1939	5MU	C4-C5	2.21	1.48	1.44
1	1A	2503	2MA	C2-N3	2.19	1.35	1.31
32	2a	1404	5MC	C6-N1	-2.17	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.17	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.16	1.34	1.38
1	1A	1915	5MU	C4-C5	2.16	1.48	1.44
1	1A	1942	5MC	C6-N1	-2.16	1.34	1.38
1	2A	1939	5MU	C4-C5	2.15	1.48	1.44
32	2a	967	5MC	C6-N1	-2.15	1.34	1.38
1	2A	1915	5MU	C4-C5	2.13	1.48	1.44
1	2A	1939	5MU	C6-N1	-2.11	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.10	1.34	1.38
32	1a	967	5MC	C6-N1	-2.09	1.34	1.38
32	1a	527	G7M	C6-N1	-2.06	1.34	1.37
32	2a	1207	2MG	C6-N1	-2.05	1.34	1.37
1	2A	1939	5MU	C2-N1	2.05	1.41	1.38
1	2A	2503	2MA	C6-N1	-2.05	1.33	1.38
32	1a	1407	5MC	C6-N1	-2.04	1.34	1.38
1	2A	2552	OMU	C2-N3	-2.04	1.34	1.38
1	1A	2552	OMU	C6-C5	2.04	1.39	1.35
43	1l	92	0TD	CSB-SB	-2.03	1.75	1.79
32	1a	1402	4OC	C6-C5	2.02	1.39	1.35
1	2A	1911	PSU	C2-N3	-2.02	1.34	1.37
1	1A	2552	OMU	C2-N3	-2.01	1.34	1.38

All (139) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-9.95	84.43	102.44
43	2l	92	0TD	CSB-SB-CB	-9.26	85.69	102.44
32	1a	1498	UR3	C4-N3-C2	-6.24	118.69	124.56
32	2a	1498	UR3	C4-N3-C2	-6.00	118.92	124.56
1	2A	1911	PSU	N1-C2-N3	5.88	121.79	115.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	516	PSU	N1-C2-N3	5.85	121.76	115.13
1	1A	1911	PSU	N1-C2-N3	5.80	121.70	115.13
1	2A	1917	PSU	N1-C2-N3	5.70	121.59	115.13
1	1A	2605	PSU	N1-C2-N3	5.63	121.51	115.13
1	2A	1939	5MU	C4-N3-C2	-5.60	120.10	127.35
1	2A	1939	5MU	N3-C2-N1	5.50	122.19	114.89
1	2A	2605	PSU	N1-C2-N3	5.49	121.35	115.13
1	1A	1939	5MU	C4-N3-C2	-5.42	120.34	127.35
1	1A	1917	PSU	N1-C2-N3	5.32	121.15	115.13
32	1a	516	PSU	N1-C2-N3	5.17	120.99	115.13
1	1A	1939	5MU	N3-C2-N1	5.06	121.61	114.89
1	2A	1915	5MU	N3-C2-N1	4.98	121.50	114.89
1	1A	1939	5MU	C5-C4-N3	4.97	119.55	115.31
1	1A	1915	5MU	C5-C4-N3	4.97	119.55	115.31
32	2a	1519	MA6	N3-C2-N1	-4.83	121.14	128.68
1	2A	2552	OMU	C4-N3-C2	-4.82	120.22	126.58
1	1A	1915	5MU	C4-N3-C2	-4.82	121.11	127.35
1	2A	1939	5MU	C5-C4-N3	4.81	119.42	115.31
1	2A	1915	5MU	C4-N3-C2	-4.67	121.31	127.35
1	1A	1915	5MU	C1'-N1-C2	4.66	126.00	117.57
32	2a	1518	MA6	N3-C2-N1	-4.61	121.47	128.68
1	1A	2552	OMU	N3-C2-N1	4.57	120.96	114.89
1	1A	1915	5MU	N3-C2-N1	4.54	120.92	114.89
32	1a	1519	MA6	N3-C2-N1	-4.54	121.58	128.68
32	1a	1518	MA6	N3-C2-N1	-4.46	121.71	128.68
1	2A	1915	5MU	O4-C4-C5	-4.39	119.81	124.90
1	1A	2552	OMU	C4-N3-C2	-4.33	120.87	126.58
1	1A	1915	5MU	O4-C4-C5	-4.23	120.00	124.90
1	2A	1939	5MU	O4-C4-C5	-4.18	120.06	124.90
1	2A	2552	OMU	N3-C2-N1	4.16	120.42	114.89
1	1A	1915	5MU	C1'-N1-C6	-4.14	114.23	121.12
1	1A	1939	5MU	O4-C4-C5	-4.05	120.21	124.90
1	2A	1915	5MU	C5-C4-N3	4.04	118.76	115.31
32	2a	516	PSU	C4-N3-C2	-4.04	120.52	126.34
1	2A	1917	PSU	O2-C2-N1	-3.97	118.42	122.79
1	2A	1939	5MU	C5-C6-N1	-3.94	119.29	123.34
1	1A	1942	5MC	C5-C6-N1	-3.94	119.29	123.34
1	2A	1915	5MU	C1'-N1-C2	3.93	124.69	117.57
32	1a	1400	5MC	C5-C6-N1	-3.89	119.33	123.34
1	2A	1911	PSU	C4-N3-C2	-3.87	120.76	126.34
1	1A	2605	PSU	C4-N3-C2	-3.87	120.77	126.34
32	1a	967	5MC	C5-C6-N1	-3.86	119.37	123.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1917	PSU	C4-N3-C2	-3.84	120.81	126.34
1	2A	1942	5MC	C5-C6-N1	-3.81	119.41	123.34
1	2A	1962	5MC	C5-C6-N1	-3.80	119.43	123.34
1	2A	2605	PSU	C4-N3-C2	-3.76	120.93	126.34
1	1A	1917	PSU	C4-N3-C2	-3.74	120.95	126.34
32	2a	967	5MC	C5-C6-N1	-3.69	119.54	123.34
1	1A	1911	PSU	C4-N3-C2	-3.69	121.03	126.34
1	1A	1939	5MU	C5-C6-N1	-3.67	119.56	123.34
32	2a	1400	5MC	C5-C6-N1	-3.66	119.57	123.34
32	1a	516	PSU	C4-N3-C2	-3.60	121.15	126.34
1	2A	2552	OMU	C5-C4-N3	3.57	120.19	114.84
32	1a	1407	5MC	C5-C6-N1	-3.42	119.82	123.34
32	2a	516	PSU	O2-C2-N1	-3.40	119.05	122.79
1	1A	1911	PSU	O2-C2-N1	-3.39	119.06	122.79
32	1a	1404	5MC	C5-C6-N1	-3.27	119.97	123.34
32	2a	1519	MA6	C4-C5-N7	-3.27	105.99	109.40
32	2a	1404	5MC	C5-C4-N3	-3.26	118.16	121.67
1	2A	2552	OMU	O2-C2-N1	-3.25	118.47	122.79
1	1A	1962	5MC	C5-C6-N1	-3.25	120.00	123.34
32	2a	1404	5MC	C5-C6-N1	-3.22	120.02	123.34
32	2a	1407	5MC	C5-C6-N1	-3.22	120.02	123.34
1	1A	2552	OMU	C5-C4-N3	3.16	119.57	114.84
32	1a	516	PSU	O2-C2-N1	-2.99	119.50	122.79
1	2A	1915	5MU	C1'-N1-C6	-2.96	116.20	121.12
1	1A	2552	OMU	O2-C2-N1	-2.95	118.86	122.79
32	2a	1518	MA6	C4-C5-N7	-2.92	106.35	109.40
1	2A	1942	5MC	C5-C4-N3	-2.89	118.56	121.67
32	1a	1519	MA6	C4-C5-N7	-2.87	106.40	109.40
1	2A	2552	OMU	O4-C4-C5	-2.85	120.15	125.16
1	2A	2503	2MA	C8-N7-C5	2.76	108.25	102.99
1	2A	1911	PSU	O2-C2-N1	-2.76	119.76	122.79
32	1a	1518	MA6	C4-C5-N7	-2.75	106.54	109.40
32	1a	1402	4OC	C6-C5-C4	2.74	120.31	116.96
1	1A	1915	5MU	O2-C2-N3	-2.74	116.40	121.50
1	2A	1939	5MU	O2-C2-N1	-2.72	119.17	122.79
32	2a	1407	5MC	C5-C4-N3	-2.71	118.75	121.67
32	1a	1207	2MG	CM2-N2-C2	-2.70	117.90	123.86
32	1a	1207	2MG	C8-N7-C5	2.67	108.08	102.99
1	1A	1939	5MU	O2-C2-N1	-2.67	119.24	122.79
32	1a	1400	5MC	C5-C4-N3	-2.65	118.82	121.67
1	1A	1917	PSU	O2-C2-N1	-2.63	119.90	122.79
1	2A	1915	5MU	C5-C6-N1	-2.59	120.68	123.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2251	OMG	C8-N7-C5	2.56	107.88	102.99
1	1A	2251	OMG	C5-C6-N1	2.55	118.45	113.95
32	2a	1207	2MG	C8-N7-C5	2.52	107.79	102.99
1	1A	2605	PSU	O2-C2-N1	-2.51	120.03	122.79
1	2A	2503	2MA	C5-C6-N1	2.44	118.23	114.02
1	1A	2503	2MA	C5-C6-N1	2.44	118.22	114.02
1	1A	1915	5MU	C5-C6-N1	-2.44	120.83	123.34
1	2A	2251	OMG	C5-C6-N1	2.41	118.20	113.95
32	1a	1498	UR3	C3U-N3-C2	2.40	121.52	117.31
32	1a	1404	5MC	C5-C4-N3	-2.39	119.10	121.67
1	1A	2251	OMG	C8-N7-C5	2.38	107.53	102.99
32	1a	1407	5MC	O2-C2-N3	-2.38	118.46	122.33
32	2a	966	M2G	C8-N7-C5	2.38	107.52	102.99
32	2a	1407	5MC	O2-C2-N3	-2.37	118.47	122.33
1	2A	1915	5MU	O2-C2-N3	-2.36	117.10	121.50
32	2a	1400	5MC	C5-C4-N3	-2.36	119.13	121.67
32	2a	516	PSU	O4'-C1'-C2'	2.34	108.44	105.14
1	2A	1920	OMC	O2-C2-N3	-2.33	118.53	122.33
32	2a	1402	4OC	C6-C5-C4	2.33	119.81	116.96
1	1A	2503	2MA	C8-N7-C5	2.32	107.42	102.99
32	2a	967	5MC	C5-C4-N3	-2.32	119.17	121.67
32	1a	1407	5MC	C5-C4-N3	-2.32	119.17	121.67
1	1A	1920	OMC	O2-C2-N3	-2.25	118.67	122.33
32	1a	1207	2MG	C5-C6-N1	2.24	117.91	113.95
1	1A	2552	OMU	O4-C4-C5	-2.23	121.24	125.16
1	1A	1962	5MC	C5-C4-N3	-2.20	119.30	121.67
32	1a	1498	UR3	C6-N1-C2	-2.20	119.82	121.79
32	1a	967	5MC	C5-C4-N3	-2.19	119.31	121.67
32	2a	516	PSU	C5-C6-N1	-2.18	118.83	122.11
32	1a	966	M2G	C5-C6-N1	2.18	117.80	113.95
1	2A	1915	5MU	C6-N1-C2	-2.16	119.11	121.30
32	1a	516	PSU	C6-C5-C4	-2.13	116.71	118.20
1	1A	1962	5MC	C1'-N1-C6	-2.13	117.58	121.12
1	1A	1917	PSU	C6-C5-C4	-2.11	116.72	118.20
1	2A	2605	PSU	O2-C2-N1	-2.11	120.47	122.79
32	1a	966	M2G	C8-N7-C5	2.11	107.01	102.99
32	2a	966	M2G	C5-C6-N1	2.11	117.68	113.95
1	1A	1962	5MC	CM5-C5-C6	-2.11	120.03	122.85
1	1A	1915	5MU	C5M-C5-C4	2.10	121.08	118.77
1	2A	2552	OMU	C5-C6-N1	-2.10	118.30	121.81
1	1A	1911	PSU	O4'-C1'-C2'	2.10	108.10	105.14
43	1l	92	0TD	OD2-CG-CB	2.09	117.67	113.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1404	5MC	O2-C2-N3	-2.06	118.98	122.33
1	2A	2605	PSU	C6-C5-C4	-2.06	116.76	118.20
43	2l	92	0TD	OD2-CG-CB	2.03	117.54	113.15
1	2A	2251	OMG	O6-C6-C5	-2.03	120.41	124.37
1	1A	1942	5MC	O2-C2-N3	-2.02	119.05	122.33
1	1A	1942	5MC	C5-C4-N3	-2.01	119.50	121.67
32	1a	1400	5MC	CM5-C5-C6	-2.01	120.17	122.85
32	1a	1407	5MC	CM5-C5-C6	-2.01	120.17	122.85

There are no chirality outliers.

All (34) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	O4'-C1'-N1-C2
1	1A	1915	5MU	O4'-C1'-N1-C6
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	527	G7M	O4'-C4'-C5'-O5'
32	2a	516	PSU	O4'-C1'-C5-C4
43	2l	92	0TD	CA-CB-SB-CSB
32	1a	527	G7M	C4'-C5'-O5'-P
32	1a	1400	5MC	O4'-C4'-C5'-O5'
32	2a	1518	MA6	O4'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
1	1A	1920	OMC	C2'-C1'-N1-C2
32	2a	1519	MA6	C4'-C5'-O5'-P
32	2a	516	PSU	O4'-C1'-C5-C6
32	2a	1402	4OC	C3'-C2'-O2'-CM2

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Mol	Chain	Res	Type	Atoms
1	1A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	1962	5MC	C2'-C1'-N1-C6
1	1A	1962	5MC	O4'-C1'-N1-C6
1	2A	1962	5MC	C2'-C1'-N1-C6

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2458 ligands modelled in this entry, 2446 are monoatomic - leaving 12 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
55	A1AE1	1A	3996	54	82,82,82	2.23	19 (23%)	114,122,122	2.35	32 (28%)
57	MPD	1A	3999	-	7,7,7	0.42	0	9,10,10	0.31	0
59	SF4	1d	306	35	0,12,12	-	-	-		
59	SF4	2d	501	35	0,12,12	-	-	-		
56	ARG	1B	232	-	10,11,11	0.71	0	11,13,13	1.26	2 (18%)
57	MPD	1a	1868	32	7,7,7	0.38	0	9,10,10	0.58	0
57	MPD	18	103	-	7,7,7	0.26	0	9,10,10	0.24	0
57	MPD	2A	3728	-	7,7,7	0.30	0	9,10,10	0.31	0
56	ARG	1A	3998	-	10,11,11	0.74	1 (10%)	11,13,13	1.28	2 (18%)
55	A1AE1	2A	3726	54	82,82,82	2.20	14 (17%)	114,122,122	2.08	32 (28%)
57	MPD	2B	219	-	7,7,7	0.32	0	9,10,10	0.29	0
57	MPD	1T	207	-	7,7,7	0.35	0	9,10,10	0.41	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
55	A1AE1	1A	3996	54	-	16/89/132/132	0/7/7/7
57	MPD	1A	3999	-	-	2/5/5/5	-
59	SF4	1d	306	35	-	-	0/6/5/5
59	SF4	2d	501	35	-	-	0/6/5/5
56	ARG	1B	232	-	-	5/11/11/11	-
57	MPD	1a	1868	32	-	4/5/5/5	-
57	MPD	18	103	-	-	2/5/5/5	-
57	MPD	2A	3728	-	-	4/5/5/5	-
56	ARG	1A	3998	-	-	4/11/11/11	-
55	A1AE1	2A	3726	54	-	11/89/132/132	0/7/7/7
57	MPD	2B	219	-	-	3/5/5/5	-
57	MPD	1T	207	-	-	3/5/5/5	-

All (34) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2A	3726	A1AE1	CAG-CAF	-11.66	1.41	1.53
55	1A	3996	A1AE1	CAG-CAF	-11.36	1.41	1.53
55	2A	3726	A1AE1	CAB-CAF	-6.09	1.41	1.52
55	1A	3996	A1AE1	OBR-NBJ	5.96	1.54	1.40
55	1A	3996	A1AE1	CAB-CAF	-5.94	1.41	1.52
55	2A	3726	A1AE1	OBR-NBJ	5.59	1.53	1.40
55	2A	3726	A1AE1	CCC-NCH	-5.36	1.34	1.40
55	1A	3996	A1AE1	CCF-CCN	-5.32	1.39	1.48
55	2A	3726	A1AE1	CAJ-CAI	-5.00	1.40	1.51
55	1A	3996	A1AE1	CCB-CCE	-4.93	1.38	1.48
55	2A	3726	A1AE1	CCF-CCN	-4.92	1.40	1.48
55	1A	3996	A1AE1	OBH-CAL	-4.66	1.40	1.47
55	1A	3996	A1AE1	CAJ-CAI	-4.59	1.41	1.51
55	2A	3726	A1AE1	CCB-CCE	-4.47	1.39	1.48
55	2A	3726	A1AE1	OBH-CAL	-3.93	1.41	1.47
55	1A	3996	A1AE1	CAF-NBJ	3.62	1.34	1.27
55	1A	3996	A1AE1	CCG-NCH	3.61	1.40	1.34
55	2A	3726	A1AE1	CCG-NCH	3.32	1.39	1.34
55	2A	3726	A1AE1	CAF-NBJ	3.29	1.33	1.27
55	1A	3996	A1AE1	CCI-NCH	2.87	1.51	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2A	3726	A1AE1	CBY-NBX	-2.77	1.35	1.41
55	1A	3996	A1AE1	CCC-NCH	-2.77	1.37	1.40
55	1A	3996	A1AE1	CBY-NBX	-2.60	1.35	1.41
55	2A	3726	A1AE1	FCL-CBZ	-2.38	1.29	1.35
55	2A	3726	A1AE1	CAG-CAH	2.32	1.57	1.54
55	1A	3996	A1AE1	CCT-NBX	2.27	1.50	1.46
55	1A	3996	A1AE1	OBB-CAK	2.25	1.48	1.44
55	2A	3726	A1AE1	CCT-NBX	2.14	1.50	1.46
55	1A	3996	A1AE1	OBN-CBP	2.13	1.39	1.34
55	1A	3996	A1AE1	CAA-CAE	2.06	1.55	1.52
55	1A	3996	A1AE1	CAA-CAB	2.05	1.56	1.54
55	1A	3996	A1AE1	OAN-CAM	-2.04	1.42	1.46
55	1A	3996	A1AE1	OCO-CCN	-2.02	1.24	1.30
56	1A	3998	ARG	OXT-C	-2.02	1.23	1.30

All (68) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1A	3996	A1AE1	CCC-NCH-CCI	9.83	130.24	119.89
55	1A	3996	A1AE1	CCD-CCC-NCH	7.65	126.07	120.53
55	1A	3996	A1AE1	OBB-CBT-NBV	7.11	123.59	111.11
55	1A	3996	A1AE1	CAK-OBB-CBT	-6.70	107.26	117.11
55	2A	3726	A1AE1	CAK-OBB-CBT	-6.59	107.42	117.11
55	2A	3726	A1AE1	OBB-CBT-NBV	6.48	122.49	111.11
55	1A	3996	A1AE1	CCI-NCH-CCG	-6.18	110.40	119.73
55	1A	3996	A1AE1	FCL-CBZ-CBY	5.44	123.37	118.42
55	2A	3726	A1AE1	CBE-CAM-CAL	-5.38	107.81	115.23
55	2A	3726	A1AE1	CAB-CAF-CAG	4.97	125.07	119.43
55	1A	3996	A1AE1	OBU-CBT-NBV	-4.94	117.39	124.96
55	1A	3996	A1AE1	CCA-CBZ-CBY	-4.83	119.35	123.34
55	2A	3726	A1AE1	CCK-CCI-NCH	-4.48	112.12	118.84
55	2A	3726	A1AE1	OBU-CBT-NBV	-4.44	118.15	124.96
55	2A	3726	A1AE1	CCX-NBX-CCT	4.31	121.03	111.52
55	2A	3726	A1AE1	CAE-CAA-CAB	-4.30	108.82	116.11
55	1A	3996	A1AE1	CCX-NBX-CCT	4.22	120.82	111.52
55	2A	3726	A1AE1	CCD-CBY-NBX	-4.13	116.41	122.52
55	2A	3726	A1AE1	CBZ-CBY-NBX	4.02	125.24	120.47
55	2A	3726	A1AE1	FCL-CBZ-CBY	3.90	121.97	118.42
55	2A	3726	A1AE1	CAE-CAD-CAC	-3.89	107.64	113.61
55	1A	3996	A1AE1	CAB-CAF-CAG	3.84	123.79	119.43
55	1A	3996	A1AE1	OBB-CBT-OBU	-3.66	119.01	124.53
55	2A	3726	A1AE1	CCA-CBZ-CBY	-3.63	120.34	123.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2A	3726	A1AE1	OBB-CBT-OBU	-3.44	119.35	124.53
55	2A	3726	A1AE1	CCF-CCG-NCH	-3.26	120.84	124.49
55	1A	3996	A1AE1	CCG-CCF-CCE	-3.24	117.47	119.88
56	1A	3998	ARG	OXT-C-O	-3.24	116.73	124.09
55	2A	3726	A1AE1	CCJ-CCI-NCH	-3.13	114.14	118.84
55	1A	3996	A1AE1	CBS-OBR-NBJ	3.08	111.98	108.40
55	1A	3996	A1AE1	CBW-NBV-CBT	3.02	126.74	121.89
56	1B	232	ARG	OXT-C-O	-3.02	117.24	124.09
55	2A	3726	A1AE1	CCB-CCE-CCF	2.97	119.36	115.59
55	1A	3996	A1AE1	CCD-CCC-CCB	-2.95	116.06	120.16
55	1A	3996	A1AE1	CCB-CCE-CCF	2.79	119.14	115.59
55	2A	3726	A1AE1	OAN-CAM-CAL	2.77	111.73	105.48
55	1A	3996	A1AE1	CCA-CCB-CCE	-2.72	115.29	119.95
56	1B	232	ARG	OXT-C-CA	2.72	122.64	113.38
55	2A	3726	A1AE1	CBI-CAG-CAH	2.65	116.55	112.90
55	1A	3996	A1AE1	OCM-CCE-CCB	-2.64	117.29	121.56
55	1A	3996	A1AE1	CCA-CCB-CCC	2.62	121.78	118.73
55	1A	3996	A1AE1	CCN-CCF-CCE	2.56	125.47	121.56
55	2A	3726	A1AE1	CCN-CCF-CCE	2.55	125.45	121.56
56	1A	3998	ARG	OXT-C-CA	2.55	122.07	113.38
55	1A	3996	A1AE1	CBE-CAM-CAL	-2.54	111.73	115.23
55	1A	3996	A1AE1	CAL-OBH-CBP	-2.52	104.35	109.55
55	1A	3996	A1AE1	CAX-CAR-CAS	-2.50	109.48	113.40
55	2A	3726	A1AE1	OBH-CAL-CBG	2.44	111.22	106.93
55	2A	3726	A1AE1	CAX-CAR-CAS	-2.43	109.58	113.40
55	2A	3726	A1AE1	CAL-OBH-CBP	-2.27	104.88	109.55
55	2A	3726	A1AE1	OCO-CCN-OCP	-2.26	118.44	123.61
55	2A	3726	A1AE1	CBF-CBE-CAM	-2.26	107.51	113.13
55	1A	3996	A1AE1	CCQ-CBW-NBV	-2.23	105.84	112.21
55	1A	3996	A1AE1	OCO-CCN-OCP	-2.23	118.51	123.61
55	2A	3726	A1AE1	CCB-CCC-NCH	2.20	120.43	118.81
55	2A	3726	A1AE1	CCT-NBX-CBY	2.18	121.45	116.27
55	2A	3726	A1AE1	CBW-NBV-CBT	2.16	125.35	121.89
55	1A	3996	A1AE1	CBI-CAG-CAH	2.15	115.88	112.90
55	1A	3996	A1AE1	CAH-OBN-CBP	-2.15	106.02	109.66
55	1A	3996	A1AE1	OBL-CAE-CAA	2.12	110.38	105.71
55	1A	3996	A1AE1	OBH-CAL-CAM	2.10	110.28	105.63
55	1A	3996	A1AE1	OBH-CAL-CBG	2.10	110.62	106.93
55	2A	3726	A1AE1	CAH-OBN-CBP	-2.06	106.16	109.66
55	1A	3996	A1AE1	OBB-CAK-CAC	2.06	112.29	107.50
55	2A	3726	A1AE1	CCG-CCF-CCE	-2.06	118.36	119.88
55	1A	3996	A1AE1	CCD-CBY-CBZ	2.05	118.47	116.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2A	3726	A1AE1	CCQ-CBW-NBV	-2.03	106.41	112.21
55	2A	3726	A1AE1	OCM-CCE-CCB	-2.01	118.30	121.56

There are no chirality outliers.

All (54) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	3996	A1AE1	CCE-CCF-CCN-OCO
55	1A	3996	A1AE1	CCE-CCF-CCN-OCP
55	1A	3996	A1AE1	CCJ-CCI-NCH-CCC
55	1A	3996	A1AE1	CCJ-CCI-NCH-CCG
55	1A	3996	A1AE1	CCK-CCI-NCH-CCC
55	1A	3996	A1AE1	CCK-CCI-NCH-CCG
55	2A	3726	A1AE1	CAF-NBJ-OBR-CBS
56	1A	3998	ARG	N-CA-CB-CG
56	1A	3998	ARG	CA-CB-CG-CD
56	1B	232	ARG	O-C-CA-N
56	1B	232	ARG	C-CA-CB-CG
57	1T	207	MPD	C1-C2-C3-C4
57	18	103	MPD	C2-C3-C4-O4
57	1a	1868	MPD	C2-C3-C4-O4
57	2B	219	MPD	C2-C3-C4-C5
56	1A	3998	ARG	NE-CD-CG-CB
55	1A	3996	A1AE1	CCG-CCF-CCN-OCO
55	1A	3996	A1AE1	CCG-CCF-CCN-OCP
55	1A	3996	A1AE1	CCQ-CCR-CCS-NCV
55	2A	3726	A1AE1	CCQ-CCR-CCS-NCV
56	1B	232	ARG	OXT-C-CA-N
55	1A	3996	A1AE1	CBZ-CBY-NBX-CCX
55	2A	3726	A1AE1	CCJ-CCI-NCH-CCG
55	2A	3726	A1AE1	CCJ-CCI-NCH-CCC
55	1A	3996	A1AE1	OBB-CBT-NBV-CBW
55	2A	3726	A1AE1	OBB-CBT-NBV-CBW
55	1A	3996	A1AE1	OBU-CBT-NBV-CBW
55	2A	3726	A1AE1	OBU-CBT-NBV-CBW
57	1T	207	MPD	O2-C2-C3-C4
57	2A	3728	MPD	O2-C2-C3-C4
57	2B	219	MPD	O2-C2-C3-C4
56	1A	3998	ARG	C-CA-CB-CG
55	2A	3726	A1AE1	CBE-CAM-OAN-CAI
57	1T	207	MPD	C2-C3-C4-C5
57	18	103	MPD	C2-C3-C4-C5

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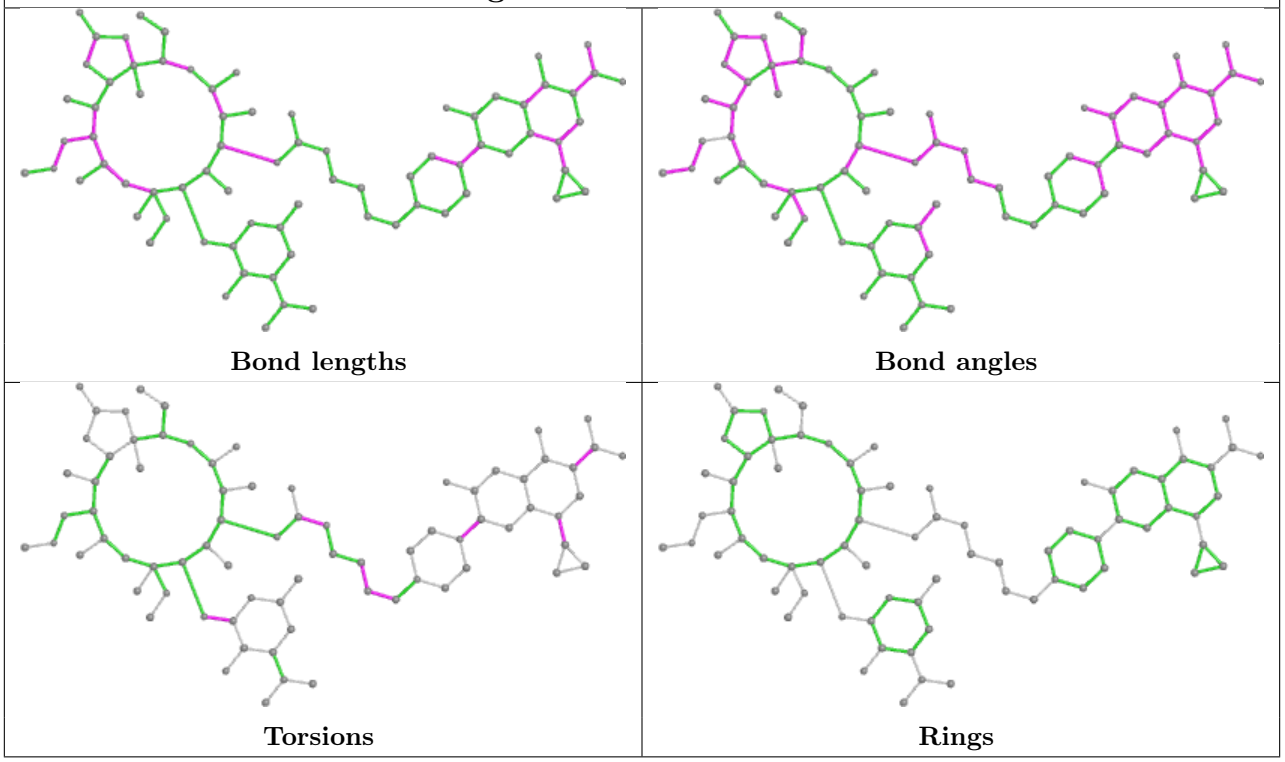
Mol	Chain	Res	Type	Atoms
57	1a	1868	MPD	C2-C3-C4-C5
55	1A	3996	A1AE1	CAU-CAP-OAO-CAD
57	1a	1868	MPD	C1-C2-C3-C4
57	2A	3728	MPD	C1-C2-C3-C4
57	2A	3728	MPD	CM-C2-C3-C4
55	1A	3996	A1AE1	CBW-CCQ-CCR-CCS
55	2A	3726	A1AE1	CBW-CCQ-CCR-CCS
55	1A	3996	A1AE1	OAQ-CAP-OAO-CAD
55	2A	3726	A1AE1	CBZ-CBY-NBX-CCT
55	1A	3996	A1AE1	CCD-CBY-NBX-CCX
57	1a	1868	MPD	O2-C2-C3-C4
55	2A	3726	A1AE1	CCD-CBY-NBX-CCT
57	1A	3999	MPD	C2-C3-C4-C5
57	2A	3728	MPD	C2-C3-C4-C5
56	1B	232	ARG	N-CA-CB-CG
55	2A	3726	A1AE1	CBZ-CBY-NBX-CCX
57	1A	3999	MPD	C2-C3-C4-O4
57	2B	219	MPD	C2-C3-C4-O4
56	1B	232	ARG	NE-CD-CG-CB

There are no ring outliers.

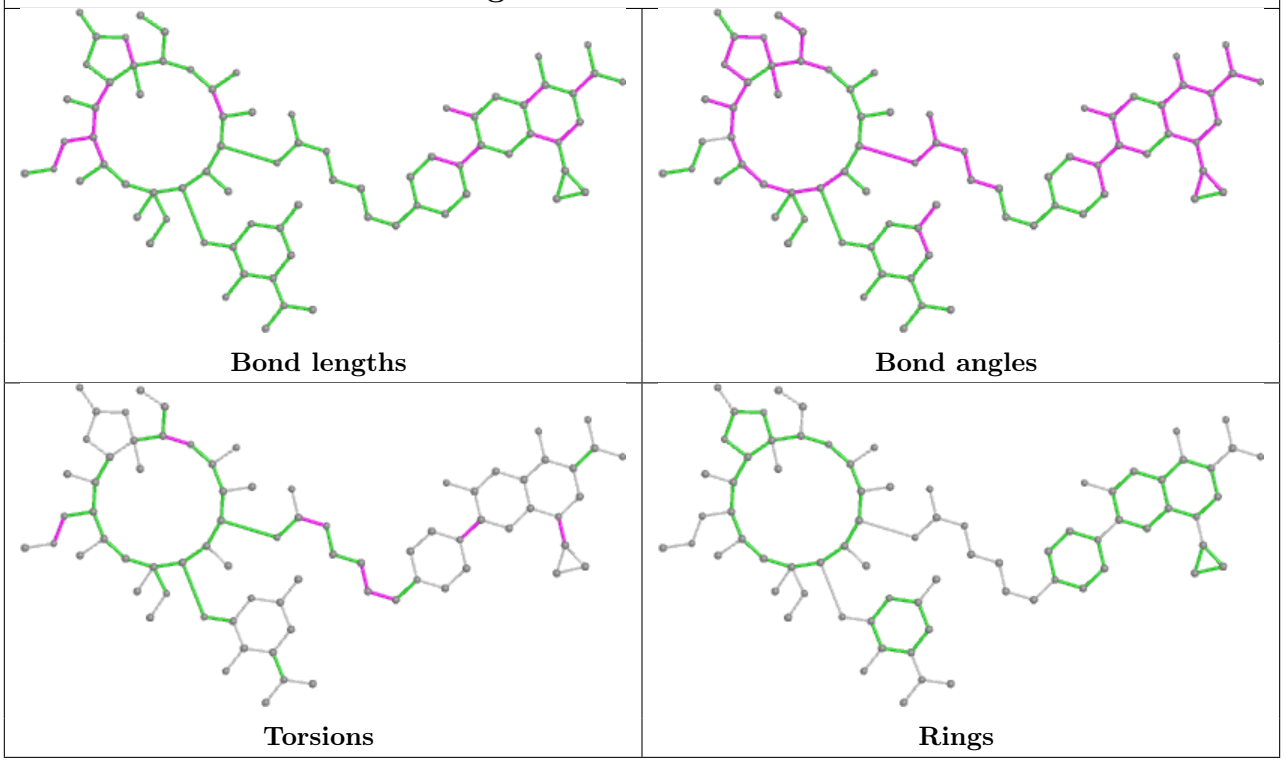
No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand A1AE1 1A 3996



Ligand A1AE1 2A 3726



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2861/2915 (98%)	0.94	137 (4%) 30 43	24, 41, 91, 102	0
1	2A	2856/2915 (97%)	0.71	160 (5%) 24 35	35, 56, 93, 102	0
2	1B	120/121 (99%)	0.54	1 (0%) 86 91	35, 54, 68, 83	0
2	2B	120/121 (99%)	0.18	1 (0%) 86 91	59, 75, 82, 87	0
3	1D	275/276 (99%)	0.68	2 (0%) 87 92	25, 40, 54, 78	0
3	2D	275/276 (99%)	0.70	8 (2%) 51 62	35, 50, 61, 77	0
4	1E	204/206 (99%)	0.71	3 (1%) 73 81	24, 44, 64, 76	0
4	2E	204/206 (99%)	0.59	7 (3%) 45 57	36, 58, 72, 82	0
5	1F	203/210 (96%)	0.77	2 (0%) 82 88	24, 46, 71, 82	0
5	2F	203/210 (96%)	0.54	1 (0%) 91 95	35, 65, 78, 84	0
6	1G	181/182 (99%)	0.33	6 (3%) 46 59	52, 66, 79, 87	0
6	2G	181/182 (99%)	1.23	46 (25%) 0 1	70, 80, 86, 91	0
7	1H	174/180 (96%)	0.53	2 (1%) 80 87	44, 57, 69, 76	0
7	2H	173/180 (96%)	1.79	64 (36%) 0 0	67, 78, 85, 86	0
8	1I	147/148 (99%)	0.49	3 (2%) 65 75	44, 71, 80, 82	0
8	2I	146/148 (98%)	0.81	18 (12%) 4 7	57, 74, 82, 84	0
9	1N	140/140 (100%)	0.98	1 (0%) 87 92	31, 44, 64, 77	0
9	2N	140/140 (100%)	0.56	5 (3%) 42 55	49, 63, 75, 81	0
10	1O	122/122 (100%)	0.53	0 100 100	32, 43, 61, 67	0
10	2O	122/122 (100%)	0.49	3 (2%) 57 67	46, 56, 68, 74	0
11	1P	149/150 (99%)	0.73	1 (0%) 87 92	24, 49, 68, 79	0
11	2P	149/150 (99%)	0.71	9 (6%) 21 32	37, 66, 79, 85	0
12	1Q	141/141 (100%)	0.61	0 100 100	33, 44, 57, 67	0
12	2Q	141/141 (100%)	0.71	8 (5%) 23 34	45, 63, 71, 79	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	0.73	0 100 100	29, 40, 55, 63	0
13	2R	118/118 (100%)	0.55	2 (1%) 70 78	42, 53, 62, 71	0
14	1S	110/112 (98%)	0.64	1 (0%) 84 90	42, 54, 66, 73	0
14	2S	110/112 (98%)	0.56	11 (10%) 7 11	62, 71, 77, 79	0
15	1T	131/146 (89%)	0.55	4 (3%) 49 61	37, 48, 69, 85	0
15	2T	131/146 (89%)	0.64	8 (6%) 21 31	50, 60, 76, 82	0
16	1U	116/118 (98%)	0.95	1 (0%) 84 90	28, 37, 53, 69	0
16	2U	116/118 (98%)	0.68	1 (0%) 84 90	41, 58, 71, 75	0
17	1V	101/101 (100%)	0.82	0 100 100	28, 49, 64, 73	0
17	2V	101/101 (100%)	0.58	2 (1%) 65 75	42, 68, 75, 78	0
18	1W	112/113 (99%)	0.98	2 (1%) 68 77	31, 38, 57, 84	0
18	2W	112/113 (99%)	0.73	1 (0%) 84 90	39, 51, 67, 87	0
19	1X	95/96 (98%)	0.84	2 (2%) 63 74	31, 41, 65, 73	0
19	2X	95/96 (98%)	0.63	4 (4%) 36 48	47, 59, 75, 82	0
20	1Y	107/110 (97%)	0.77	2 (1%) 66 76	41, 53, 69, 77	0
20	2Y	107/110 (97%)	0.80	9 (8%) 11 16	60, 70, 77, 85	0
21	1Z	203/206 (98%)	0.50	5 (2%) 57 67	46, 61, 76, 84	0
21	2Z	201/206 (97%)	0.62	16 (7%) 12 18	64, 75, 82, 86	0
22	10	83/85 (97%)	1.54	8 (9%) 8 12	34, 42, 76, 84	0
22	20	83/85 (97%)	1.35	8 (9%) 8 12	50, 62, 76, 88	0
23	11	97/98 (98%)	0.79	4 (4%) 37 49	31, 46, 67, 74	0
23	21	97/98 (98%)	0.78	5 (5%) 27 39	41, 57, 74, 79	0
24	12	70/72 (97%)	0.76	0 100 100	38, 51, 63, 82	0
24	22	70/72 (97%)	0.35	0 100 100	59, 69, 75, 79	0
25	13	59/60 (98%)	0.84	0 100 100	31, 43, 67, 75	0
25	23	59/60 (98%)	0.55	0 100 100	49, 60, 75, 79	0
26	14	69/71 (97%)	0.88	14 (20%) 1 1	63, 79, 88, 90	0
26	24	69/71 (97%)	1.80	21 (30%) 0 0	78, 85, 91, 92	0
27	15	59/60 (98%)	0.91	1 (1%) 70 78	26, 40, 61, 71	0
27	25	59/60 (98%)	0.41	0 100 100	37, 52, 68, 77	0
28	16	53/54 (98%)	0.66	0 100 100	37, 46, 60, 66	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.44	1 (1%) 66 76	52, 61, 68, 73	0
29	17	48/49 (97%)	1.01	4 (8%) 11 16	24, 31, 54, 65	0
29	27	48/49 (97%)	0.93	6 (12%) 3 6	36, 42, 68, 72	0
30	18	64/65 (98%)	0.70	0 100 100	31, 38, 44, 57	0
30	28	64/65 (98%)	1.00	5 (7%) 13 19	46, 54, 62, 67	0
31	19	37/37 (100%)	0.66	1 (2%) 54 64	38, 46, 58, 60	0
31	29	37/37 (100%)	1.54	9 (24%) 0 1	56, 65, 72, 75	0
32	1a	1488/1521 (97%)	0.65	91 (6%) 21 31	40, 68, 90, 102	0
32	2a	1492/1521 (98%)	0.65	75 (5%) 28 41	47, 74, 91, 101	0
33	1b	231/256 (90%)	0.60	14 (6%) 21 31	65, 77, 84, 89	0
33	2b	231/256 (90%)	0.86	33 (14%) 2 4	71, 81, 86, 91	0
34	1c	206/239 (86%)	0.73	21 (10%) 6 11	60, 72, 82, 88	0
34	2c	206/239 (86%)	1.51	60 (29%) 0 0	71, 81, 86, 89	0
35	1d	208/209 (99%)	1.07	31 (14%) 2 3	58, 71, 78, 85	0
35	2d	208/209 (99%)	1.27	42 (20%) 1 1	62, 71, 78, 82	0
36	1e	148/162 (91%)	0.62	5 (3%) 45 57	53, 65, 74, 84	0
36	2e	148/162 (91%)	0.71	11 (7%) 14 22	55, 70, 78, 87	0
37	1f	100/101 (99%)	0.39	2 (2%) 65 75	57, 67, 74, 79	0
37	2f	100/101 (99%)	0.31	1 (1%) 82 88	58, 67, 76, 79	0
38	1g	155/156 (99%)	0.56	10 (6%) 18 27	63, 71, 79, 84	0
38	2g	155/156 (99%)	0.81	25 (16%) 1 3	70, 78, 83, 85	0
39	1h	137/138 (99%)	0.72	12 (8%) 10 15	55, 68, 74, 80	0
39	2h	137/138 (99%)	0.64	6 (4%) 34 46	60, 70, 77, 80	0
40	1i	127/128 (99%)	1.43	37 (29%) 0 0	61, 77, 83, 85	0
40	2i	126/128 (98%)	2.45	69 (54%) 0 0	71, 82, 86, 89	0
41	1j	97/105 (92%)	1.06	15 (15%) 2 3	60, 77, 84, 87	0
41	2j	96/105 (91%)	2.52	54 (56%) 0 0	73, 82, 87, 91	0
42	1k	114/129 (88%)	0.53	2 (1%) 68 77	46, 65, 75, 80	0
42	2k	114/129 (88%)	0.51	8 (7%) 16 24	57, 70, 79, 82	0
43	1l	121/132 (91%)	0.85	12 (9%) 7 11	49, 60, 70, 74	0
43	2l	121/132 (91%)	0.88	16 (13%) 3 5	56, 66, 73, 77	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	0.96	18 (15%)	2	3	62, 75, 80, 84	0
44	2m	114/126 (90%)	1.20	23 (20%)	1	1	73, 81, 85, 88	0
45	1n	60/61 (98%)	1.55	15 (25%)	0	1	63, 70, 78, 81	0
45	2n	60/61 (98%)	3.30	45 (75%)	0	0	72, 79, 84, 90	0
46	1o	88/89 (98%)	0.69	6 (6%)	17	25	49, 67, 76, 79	0
46	2o	88/89 (98%)	0.51	3 (3%)	45	57	58, 70, 78, 82	0
47	1p	82/88 (93%)	1.76	30 (36%)	0	0	60, 71, 80, 84	0
47	2p	82/88 (93%)	1.26	16 (19%)	1	2	63, 69, 78, 85	0
48	1q	99/105 (94%)	1.14	16 (16%)	1	2	56, 69, 77, 79	0
48	2q	99/105 (94%)	0.83	3 (3%)	50	61	57, 68, 76, 79	0
49	1r	68/88 (77%)	0.50	3 (4%)	34	46	58, 65, 77, 83	0
49	2r	68/88 (77%)	0.43	1 (1%)	73	81	63, 70, 79, 83	0
50	1s	83/93 (89%)	1.22	18 (21%)	0	1	65, 76, 81, 85	0
50	2s	83/93 (89%)	2.40	41 (49%)	0	0	77, 84, 88, 91	0
51	1t	96/106 (90%)	1.88	41 (42%)	0	0	61, 71, 80, 82	0
51	2t	98/106 (92%)	1.35	24 (24%)	0	1	60, 69, 80, 82	0
52	1u	23/27 (85%)	2.51	14 (60%)	0	0	66, 71, 75, 77	0
52	2u	23/27 (85%)	2.99	16 (69%)	0	0	76, 78, 82, 82	0
53	1y	97/113 (85%)	1.16	19 (19%)	1	2	54, 64, 74, 81	0
53	2y	96/113 (84%)	2.30	51 (53%)	0	0	67, 76, 83, 84	0
All	All	20778/21468 (96%)	0.83	1701 (8%)	11	17	24, 63, 85, 102	0

All (1701) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
22	20	3	HIS	14.0
22	10	2	ALA	13.9
1	1A	1087	G	11.6
1	1A	1075	C	10.7
22	20	4	LYS	10.3
1	1A	1067	A	10.1
26	24	49	PHE	9.9
1	2A	2174	C	9.4
22	10	3	HIS	9.4
22	10	7	LEU	9.3

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Mol	Chain	Res	Type	RSRZ
1	1A	1091	G	9.1
22	10	6	GLY	9.1
22	20	7	LEU	9.1
1	2A	2124	G	8.9
22	10	4	LYS	8.7
1	2A	2147	G	8.6
1	2A	2138	C	8.5
1	1A	1089	G	8.5
1	2A	2140	C	8.4
45	2n	2	ALA	8.3
1	1A	1080	C	8.2
1	2A	2139	C	8.1
40	2i	127	LYS	8.1
32	1a	1030(B)	C	8.1
1	2A	2153	G	8.0
22	20	2	ALA	7.9
35	1d	2	GLY	7.9
1	2A	2125	G	7.8
1	2A	1046	A	7.8
1	2A	2169	A	7.8
32	1a	1001	A	7.8
52	2u	14	TRP	7.7
1	1A	1072	C	7.7
45	2n	12	ARG	7.7
32	2a	1030(B)	C	7.7
1	2A	2136	C	7.5
1	2A	2135	A	7.5
1	1A	1090	U	7.4
32	2a	1030(A)	G	7.3
43	2l	18	VAL	7.3
32	2a	1036	G	7.3
1	2A	2146	C	7.2
1	1A	1068	G	7.2
1	1A	1076	C	7.2
40	2i	109	VAL	7.1
1	2A	2106	G	7.1
1	2A	2154	G	7.1
1	1A	2602	A	7.1
32	2a	1001(A)	G	7.1
20	2Y	1	MET	7.0
1	1A	1088	A	7.0
32	2a	1001	A	6.9

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Mol	Chain	Res	Type	RSRZ
45	2n	35	ARG	6.9
6	2G	39	ILE	6.9
1	1A	1077	A	6.9
32	1a	1036	G	6.8
45	2n	34	TYR	6.8
1	2A	2173	A	6.8
40	2i	66	ARG	6.8
34	2c	157	ILE	6.7
1	2A	2126	A	6.7
1	2A	2107	C	6.7
44	2m	87	TYR	6.7
45	2n	13	THR	6.7
1	1A	1079	C	6.6
32	1a	1001(A)	G	6.6
1	2A	2152	G	6.6
34	2c	160	ALA	6.6
23	11	2	SER	6.5
26	24	63	TYR	6.5
1	2A	2142	C	6.5
1	2A	1509	C	6.5
1	2A	2168	G	6.5
50	2s	10	PHE	6.5
22	20	6	GLY	6.5
22	10	5	LYS	6.4
1	1A	2141	G	6.4
1	2A	2145	C	6.4
32	2a	1257	U	6.4
1	1A	1093	G	6.4
1	2A	2162	G	6.4
1	2A	1085	A	6.3
41	2j	67	THR	6.3
1	2A	2141	G	6.3
1	1A	1103	A	6.3
1	2A	2127	G	6.3
1	1A	1074	G	6.2
50	2s	49	ILE	6.2
1	2A	2148	G	6.2
1	2A	2176	A	6.2
7	2H	115	VAL	6.2
26	24	66	SER	6.2
1	1A	1065	U	6.1
1	1A	1064	C	6.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1033	G	6.1
45	2n	6	LEU	6.1
53	2y	88	LEU	6.1
1	2A	2108	C	6.0
33	2b	132	LYS	6.0
1	2A	2151	G	6.0
1	1A	2147	G	6.0
45	2n	25	VAL	6.0
52	1u	14	TRP	6.0
41	2j	47	PHE	5.9
1	1A	1063	G	5.9
1	2A	2120	G	5.9
1	2A	1067	A	5.9
44	2m	116	THR	5.9
52	2u	16	GLY	5.9
21	2Z	187	ALA	5.9
1	2A	2110	G	5.9
40	2i	76	ALA	5.8
45	1n	2	ALA	5.8
53	1y	95	ARG	5.8
1	1A	888	C	5.8
43	2l	19	ARG	5.8
1	2A	2119	A	5.8
35	2d	5	ILE	5.8
1	2A	2137	C	5.8
32	1a	1492	A	5.7
1	2A	2179	C	5.7
6	2G	152	LEU	5.7
32	2a	1031	G	5.7
1	1A	1102	C	5.6
41	2j	6	ILE	5.6
40	2i	90	PRO	5.6
53	2y	40	ILE	5.6
50	2s	67	VAL	5.6
26	14	49	PHE	5.6
41	2j	29	ARG	5.6
1	2A	2133	G	5.6
1	2A	2143	C	5.6
32	1a	1031	G	5.6
46	1o	89	GLY	5.6
51	1t	70	SER	5.6
32	2a	1030	C	5.6

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Mol	Chain	Res	Type	RSRZ
1	2A	2175	C	5.6
38	2g	41	ARG	5.6
1	1A	1069	A	5.5
1	1A	2173	A	5.5
8	2I	35	LEU	5.5
40	1i	46	ALA	5.5
41	2j	34	VAL	5.5
32	2a	1030(C)	G	5.5
1	2A	2117	A	5.5
1	2A	2116	G	5.5
52	2u	6	ARG	5.5
1	1A	2142	C	5.5
40	2i	108	VAL	5.5
1	1A	1071	G	5.5
33	2b	122	PHE	5.5
26	24	19	GLY	5.5
7	2H	101	ARG	5.5
26	24	67	TYR	5.4
15	1T	38	ASN	5.4
1	1A	1078	U	5.4
41	2j	72	VAL	5.4
1	2A	2118	U	5.4
38	1g	156	TRP	5.4
38	2g	117	ALA	5.4
50	2s	9	VAL	5.4
1	1A	2115	G	5.4
32	2a	1034	G	5.4
32	1a	1028	C	5.4
51	1t	76	ALA	5.4
44	1m	115	LYS	5.4
32	1a	1024	G	5.3
7	2H	128	PRO	5.3
41	2j	38	ILE	5.3
1	2A	888	C	5.3
1	1A	1081	U	5.3
1	2A	2132	U	5.3
33	1b	229	VAL	5.3
51	1t	67	ALA	5.3
1	2A	2165	G	5.3
26	24	50	VAL	5.3
34	2c	159	GLY	5.3
44	2m	6	GLY	5.3

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Mol	Chain	Res	Type	RSRZ
38	2g	154	TYR	5.3
1	2A	2155	G	5.3
1	1A	2132	U	5.3
6	2G	62	LEU	5.2
1	2A	229	A	5.2
21	2Z	191	VAL	5.2
1	2A	2123	G	5.2
41	2j	44	VAL	5.2
21	1Z	188	ALA	5.2
50	2s	31	ILE	5.2
35	1d	3	ARG	5.2
41	2j	20	ALA	5.2
41	2j	96	ILE	5.2
45	2n	55	GLY	5.2
50	2s	11	VAL	5.2
1	2A	2170	A	5.2
50	2s	40	ILE	5.1
1	1A	2116	G	5.1
1	1A	1066	U	5.1
50	2s	69	HIS	5.1
1	1A	1085	A	5.1
32	2a	1030(D)	A	5.1
50	2s	62	ILE	5.1
1	2A	2121	G	5.1
6	2G	146	TYR	5.1
1	1A	1092	C	5.1
1	1A	1509	C	5.1
32	1a	1286	A	5.1
53	2y	77	LEU	5.1
1	2A	2149	G	5.1
1	2A	2159	G	5.1
32	1a	1030(C)	G	5.1
27	15	60	VAL	5.1
1	2A	2150	U	5.1
32	2a	1032	G	5.1
1	1A	2145	C	5.1
1	1A	2146	C	5.1
1	1A	1070	A	5.1
34	2c	194	GLY	5.1
35	1d	167	GLY	5.1
34	2c	124	ILE	5.1
53	2y	41	LEU	5.0

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Mol	Chain	Res	Type	RSRZ
32	2a	1003	G	5.0
38	2g	80	VAL	5.0
35	1d	70	ILE	5.0
45	2n	61	TRP	5.0
23	21	2	SER	5.0
40	1i	128	ARG	5.0
51	1t	9	ASN	5.0
7	2H	43	VAL	5.0
38	2g	34	GLY	5.0
34	2c	87	LEU	5.0
35	1d	157	LEU	5.0
7	2H	76	VAL	5.0
7	2H	92	ILE	5.0
53	2y	73	ALA	5.0
1	2A	2134	A	5.0
32	1a	1030(D)	A	5.0
32	2a	1002	G	4.9
34	2c	8	ILE	4.9
32	2a	1027	C	4.9
1	1A	2154	G	4.9
40	2i	125	TYR	4.9
41	2j	65	LEU	4.9
53	2y	10	MET	4.9
1	2A	2111	C	4.9
1	1A	2153	G	4.9
1	1A	1082	U	4.9
42	2k	89	ALA	4.9
32	1a	1026	G	4.9
1	1A	2176	A	4.9
1	2A	1083	U	4.8
45	2n	54	PRO	4.8
40	2i	18	PHE	4.8
41	2j	68	HIS	4.8
1	1A	1086	A	4.8
6	2G	182	LYS	4.8
40	2i	7	THR	4.8
52	2u	2	GLY	4.8
21	1Z	192	ALA	4.8
41	2j	74	ILE	4.8
1	1A	2117	A	4.8
26	24	54	GLY	4.8
51	1t	68	LYS	4.8

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Mol	Chain	Res	Type	RSRZ
7	2H	95	ARG	4.8
51	1t	72	LEU	4.7
48	1q	27	PHE	4.7
40	2i	4	TYR	4.7
50	2s	16	LEU	4.7
1	1A	2159	G	4.7
1	2A	2178	C	4.7
51	1t	18	GLN	4.7
1	1A	1083	U	4.7
32	2a	1028	C	4.7
34	2c	196	LEU	4.7
7	2H	102	ALA	4.7
1	2A	2109	U	4.7
32	1a	1000	U	4.7
50	2s	66	MET	4.7
40	2i	102	LEU	4.7
35	2d	146	ILE	4.7
53	2y	38	HIS	4.7
41	2j	27	ALA	4.7
53	2y	64	SER	4.6
40	2i	14	VAL	4.6
47	1p	19	ILE	4.6
1	2A	2161	C	4.6
32	1a	1037	C	4.6
26	24	68	ARG	4.6
53	2y	70	MET	4.6
32	2a	1286	A	4.6
52	1u	10	ARG	4.6
1	2A	2177	C	4.6
7	2H	82	GLY	4.6
45	2n	14	PRO	4.6
7	2H	103	LEU	4.6
32	2a	1035	A	4.6
46	2o	89	GLY	4.6
53	2y	11	GLU	4.6
1	2A	2602	A	4.6
40	2i	75	ASP	4.6
40	2i	65	VAL	4.6
41	2j	16	LEU	4.6
53	2y	39	ILE	4.5
1	1A	2113	U	4.5
33	2b	118	LEU	4.5

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Mol	Chain	Res	Type	RSRZ
53	2y	51	ASP	4.5
32	1a	1029	C	4.5
42	2k	25	TYR	4.5
53	2y	4	ASN	4.5
26	14	52	THR	4.5
41	2j	19	SER	4.5
26	24	45	GLY	4.5
45	2n	38	GLY	4.5
51	1t	66	ALA	4.5
53	2y	12	ILE	4.5
38	1g	16	LEU	4.5
1	2A	1084	A	4.5
1	1A	2140	C	4.4
34	2c	163	ALA	4.4
1	2A	2160	G	4.4
32	2a	1026	G	4.4
35	2d	149	ALA	4.4
50	2s	41	VAL	4.4
1	1A	2161	C	4.4
1	2A	2166	G	4.4
32	1a	1030(A)	G	4.4
40	2i	63	ILE	4.4
32	2a	91	C	4.4
32	2a	1021	G	4.4
1	2A	652(B)	A	4.4
32	2a	1029	C	4.4
47	1p	79	VAL	4.4
1	2A	2156	G	4.3
38	2g	42	ILE	4.3
7	2H	41	MET	4.3
32	1a	1257	U	4.3
6	2G	135	LEU	4.3
40	1i	79	LEU	4.3
51	1t	73	HIS	4.3
7	2H	113	VAL	4.3
32	1a	1447	A	4.3
40	1i	33	PHE	4.3
34	2c	33	LEU	4.3
1	1A	2152	G	4.3
44	2m	5	ALA	4.3
34	2c	190	ARG	4.3
40	2i	104	ARG	4.3

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Mol	Chain	Res	Type	RSRZ
34	1c	193	TYR	4.3
1	1A	1094	U	4.3
1	1A	2127	G	4.3
41	2j	64	GLU	4.3
52	2u	15	ARG	4.3
26	24	52	THR	4.3
41	2j	35	SER	4.3
47	1p	59	TRP	4.3
32	2a	994	A	4.2
32	1a	1027	C	4.2
1	2A	2172	U	4.2
29	27	47	ARG	4.2
52	1u	9	ARG	4.2
33	2b	121	LEU	4.2
40	2i	8	GLY	4.2
53	2y	9	GLN	4.2
1	2A	2157	G	4.2
1	2A	2158	A	4.2
45	1n	18	VAL	4.2
1	1A	2149	G	4.2
45	2n	39	LEU	4.2
48	1q	98	LEU	4.2
21	2Z	51	ALA	4.2
7	2H	159	GLU	4.2
26	24	40	HIS	4.2
32	1a	1023	G	4.2
50	2s	5	LEU	4.2
44	2m	102	ARG	4.2
34	2c	188	LEU	4.1
1	1A	1096	A	4.1
1	2A	2144	U	4.1
1	2A	2164	C	4.1
43	1l	91	LYS	4.1
21	2Z	192	ALA	4.1
36	2e	22	GLY	4.1
41	2j	40	LEU	4.1
50	2s	15	LEU	4.1
51	1t	20	LEU	4.1
1	1A	2155	G	4.1
1	1A	2139	C	4.1
32	2a	1447	A	4.1
32	1a	1030	C	4.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1006	C	4.1
45	1n	34	TYR	4.1
47	1p	7	ALA	4.1
22	20	5	LYS	4.1
1	1A	2112	G	4.1
1	2A	2181	G	4.1
3	1D	275	LYS	4.1
45	2n	53	LEU	4.1
1	1A	2148	G	4.1
40	2i	21	PRO	4.1
40	2i	72	GLY	4.1
45	2n	26	ARG	4.1
1	1A	2143	C	4.0
26	14	56	VAL	4.0
50	2s	60	VAL	4.0
8	2I	3	VAL	4.0
47	2p	48	TRP	4.0
43	1l	64	TYR	4.0
34	2c	101	LEU	4.0
26	14	46	GLN	4.0
1	2A	2105	C	4.0
1	2A	1095	A	4.0
1	2A	1103	A	4.0
44	1m	2	ALA	4.0
50	1s	72	GLY	4.0
53	2y	8	LYS	4.0
41	2j	87	THR	4.0
35	1d	4	TYR	4.0
29	17	1	MET	4.0
51	1t	62	LEU	4.0
40	2i	30	GLY	4.0
1	2A	1104	C	4.0
1	1A	2126	A	4.0
32	1a	220	G	4.0
48	2q	98	LEU	4.0
44	1m	107	ALA	4.0
53	2y	67	HIS	4.0
41	2j	98	ILE	3.9
33	2b	131	PRO	3.9
23	21	83	GLU	3.9
52	2u	13	ILE	3.9
1	1A	1057	A	3.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2169	A	3.9
1	2A	2131	G	3.9
26	24	46	GLN	3.9
45	2n	28	GLY	3.9
1	1A	2114	A	3.9
41	2j	89	ASP	3.9
43	2l	13	LYS	3.9
6	1G	146	TYR	3.9
40	2i	114	TYR	3.9
41	2j	63	PHE	3.9
7	2H	45	VAL	3.9
40	1i	14	VAL	3.9
1	1A	1053	C	3.9
6	2G	155	MET	3.9
7	2H	105	LEU	3.9
53	2y	52	ALA	3.9
40	2i	5	TYR	3.9
32	1a	1493	A	3.9
40	2i	17	VAL	3.9
40	2i	42	ARG	3.9
33	2b	135	GLN	3.8
6	1G	49	ASP	3.8
33	1b	136	VAL	3.8
35	2d	70	ILE	3.8
23	11	98	LEU	3.8
40	1i	78	LYS	3.8
41	2j	45	ARG	3.8
41	2j	66	ARG	3.8
32	1a	1003	G	3.8
1	1A	1104	C	3.8
38	2g	83	ALA	3.8
52	2u	18	TYR	3.8
53	2y	48	PHE	3.8
20	1Y	1	MET	3.8
41	2j	32	ALA	3.8
53	2y	71	TYR	3.8
32	1a	1035	A	3.8
35	2d	48	ALA	3.8
47	1p	1	MET	3.8
1	1A	2108	C	3.8
45	2n	15	LYS	3.8
47	1p	48	TRP	3.8

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Mol	Chain	Res	Type	RSRZ
40	2i	126	SER	3.8
32	1a	219	C	3.8
35	2d	157	LEU	3.8
1	1A	1062	G	3.8
35	2d	150	GLU	3.8
47	2p	19	ILE	3.7
1	1A	2107	C	3.7
1	2A	1043	C	3.7
32	1a	100	C	3.7
1	2A	1091	G	3.7
52	1u	21	TYR	3.7
1	1A	2129	C	3.7
47	1p	60	LEU	3.7
1	2A	2113	U	3.7
45	2n	10	ALA	3.7
50	2s	61	TYR	3.7
40	1i	26	VAL	3.7
41	2j	23	ILE	3.7
41	2j	62	HIS	3.7
1	1A	2174	C	3.7
1	2A	1075	C	3.7
1	1A	2168	G	3.7
40	1i	37	PHE	3.7
41	2j	54	PHE	3.7
33	2b	127	ILE	3.7
1	1A	229	A	3.7
1	1A	1073	A	3.7
39	1h	133	LEU	3.7
40	2i	69	GLY	3.7
1	2A	1076	C	3.7
38	2g	32	ARG	3.7
1	1A	2123	G	3.7
34	2c	23	TYR	3.7
40	1i	125	TYR	3.7
51	1t	74	LYS	3.7
53	2y	78	ILE	3.7
41	2j	85	LEU	3.7
1	2A	2130	U	3.7
45	2n	29	ARG	3.7
50	1s	19	VAL	3.7
35	1d	11	LEU	3.6
1	1A	889	C	3.6

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Mol	Chain	Res	Type	RSRZ
45	2n	59	ALA	3.6
51	1t	77	ALA	3.6
1	2A	1093	G	3.6
34	2c	206	GLU	3.6
50	2s	34	TRP	3.6
47	1p	39	TYR	3.6
40	2i	29	ASN	3.6
50	1s	71	LEU	3.6
15	2T	111	ARG	3.6
32	1a	1004	A	3.6
26	24	27	THR	3.6
45	2n	36	PHE	3.6
51	2t	9	ASN	3.6
34	2c	152	ILE	3.6
40	2i	88	TYR	3.6
45	2n	21	TYR	3.6
47	1p	17	TYR	3.6
7	2H	6	ARG	3.6
26	14	18	CYS	3.6
9	2N	85	ILE	3.6
40	1i	63	ILE	3.6
40	2i	74	ILE	3.6
53	2y	42	SER	3.6
34	1c	81	GLY	3.6
51	1t	47	GLY	3.6
1	1A	1095	A	3.6
6	2G	6	ALA	3.6
45	1n	12	ARG	3.6
7	2H	98	LEU	3.6
32	2a	80	G	3.6
44	2m	64	TRP	3.6
1	2A	889	C	3.6
7	2H	165	ALA	3.6
1	1A	1098	A	3.6
41	2j	75	ILE	3.6
51	2t	91	LEU	3.6
1	1A	1176	G	3.6
32	1a	1002	G	3.6
52	2u	12	LYS	3.6
32	2a	1321	C	3.5
19	2X	68	ARG	3.5
51	1t	23	ARG	3.5

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Mol	Chain	Res	Type	RSRZ
44	2m	98	VAL	3.5
1	1A	1099	G	3.5
1	2A	1099	G	3.5
1	2A	2115	G	3.5
32	1a	1005	A	3.5
50	1s	15	LEU	3.5
40	2i	92	TYR	3.5
44	1m	87	TYR	3.5
1	1A	2125	G	3.5
53	2y	63	ALA	3.5
1	2A	2114	A	3.5
1	2A	2171	A	3.5
7	1H	2	SER	3.5
47	1p	80	PHE	3.5
34	2c	39	ILE	3.5
45	2n	42	ILE	3.5
7	2H	24	VAL	3.5
34	1c	64	VAL	3.5
51	2t	20	LEU	3.5
36	2e	21	ALA	3.5
44	1m	116	THR	3.5
50	2s	39	THR	3.5
1	2A	1102	C	3.5
32	1a	1033	G	3.5
33	2b	44	LEU	3.5
53	2y	45	PRO	3.5
6	2G	110	ALA	3.5
1	2A	1080	C	3.5
45	2n	57	ARG	3.5
6	2G	86	MET	3.5
32	1a	204	U	3.5
47	2p	74	LEU	3.5
7	2H	129	THR	3.5
35	2d	8	VAL	3.5
21	1Z	189	ALA	3.5
40	2i	36	TYR	3.5
1	2A	1052	C	3.5
32	2a	1037	C	3.5
12	2Q	104	PHE	3.4
32	2a	1005	A	3.4
32	2a	1041	A	3.4
40	2i	37	PHE	3.4

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Mol	Chain	Res	Type	RSRZ
45	1n	16	PHE	3.4
7	2H	106	THR	3.4
38	2g	85	TYR	3.4
1	1A	2130	U	3.4
40	2i	105	ASP	3.4
29	27	48	LYS	3.4
47	1p	41	PRO	3.4
39	2h	2	LEU	3.4
6	2G	73	ALA	3.4
40	1i	28	VAL	3.4
41	1j	44	VAL	3.4
45	2n	60	SER	3.4
32	2a	998	G	3.4
35	2d	73	ARG	3.4
8	2I	97	ILE	3.4
26	14	59	PHE	3.4
1	1A	2158	A	3.4
35	1d	120	LEU	3.4
31	29	16	VAL	3.4
45	2n	18	VAL	3.4
50	2s	45	VAL	3.4
45	1n	15	LYS	3.4
1	1A	1097	U	3.4
1	2A	2191	G	3.4
53	1y	78	ILE	3.4
12	2Q	59	ARG	3.4
50	2s	76	PRO	3.4
1	2A	1064	C	3.4
44	2m	100	GLY	3.4
40	1i	126	SER	3.4
1	1A	2151	G	3.4
50	2s	29	ARG	3.4
1	1A	2144	U	3.4
33	1b	227	GLY	3.4
51	2t	6	PRO	3.4
35	1d	138	TYR	3.4
6	2G	43	LEU	3.4
41	2j	46	ARG	3.4
49	1r	42	ARG	3.4
1	1A	2150	U	3.3
52	1u	2	GLY	3.3
1	1A	2138	C	3.3

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Mol	Chain	Res	Type	RSRZ
32	1a	217	C	3.3
40	2i	20	ARG	3.3
50	1s	61	TYR	3.3
52	1u	18	TYR	3.3
53	1y	23	ARG	3.3
3	2D	2	ALA	3.3
21	2Z	188	ALA	3.3
47	1p	56	ALA	3.3
50	2s	30	LEU	3.3
50	2s	71	LEU	3.3
21	1Z	191	VAL	3.3
1	2A	887	A	3.3
32	2a	1531	A	3.3
1	2A	2129	C	3.3
32	1a	218	C	3.3
34	1c	87	LEU	3.3
34	1c	80	GLY	3.3
40	2i	67	GLY	3.3
1	1A	1059	G	3.3
1	2A	2100	G	3.3
32	1a	162	A	3.3
45	2n	24	CYS	3.3
50	2s	38	SER	3.3
44	1m	56	LEU	3.3
1	1A	2133	G	3.3
14	2S	54	LEU	3.3
51	2t	10	LEU	3.3
34	2c	128	PHE	3.3
1	1A	1061	U	3.3
45	1n	33	VAL	3.3
1	1A	2124	G	3.3
32	1a	1034	G	3.3
32	2a	79	G	3.3
7	2H	166	GLY	3.3
52	2u	23	PRO	3.3
50	1s	12	ASP	3.3
1	2A	2801(A)	A	3.2
32	2a	1357	A	3.2
34	2c	155	GLY	3.2
42	1k	25	TYR	3.2
40	2i	121	ARG	3.2
44	1m	74	VAL	3.2

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Mol	Chain	Res	Type	RSRZ
47	2p	79	VAL	3.2
41	2j	33	GLN	3.2
50	1s	68	GLY	3.2
1	2A	6	A	3.2
1	2A	1086	A	3.2
32	2a	1195	C	3.2
33	2b	97	TRP	3.2
38	2g	76	ARG	3.2
45	2n	43	CYS	3.2
47	1p	53	VAL	3.2
53	2y	20	VAL	3.2
51	1t	12	ALA	3.2
20	2Y	106	LEU	3.2
35	2d	20	TYR	3.2
40	1i	5	TYR	3.2
51	2t	55	ILE	3.2
20	2Y	89	PHE	3.2
34	2c	207	VAL	3.2
40	2i	123	PRO	3.2
33	2b	139	LYS	3.2
1	1A	2175	C	3.2
1	2A	2128	C	3.2
40	2i	56	LEU	3.2
34	1c	2	GLY	3.2
7	2H	35	VAL	3.2
36	1e	21	ALA	3.2
32	1a	841	U	3.2
32	1a	1040	U	3.2
50	2s	82	GLY	3.2
32	1a	70	G	3.2
53	2y	5	ILE	3.2
33	2b	133	LYS	3.2
34	2c	192	THR	3.2
50	2s	63	THR	3.2
26	14	66	SER	3.2
15	2T	108	ARG	3.2
26	24	51	ASP	3.2
21	2Z	125	LEU	3.2
31	29	37	GLY	3.2
32	2a	1492	A	3.2
51	1t	13	LEU	3.2
1	1A	2136	C	3.1

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Mol	Chain	Res	Type	RSRZ
1	2A	1536	C	3.1
7	2H	111	HIS	3.1
1	1A	1058	G	3.1
32	1a	78	G	3.1
40	2i	87	GLN	3.1
50	2s	52	TYR	3.1
47	1p	66	PRO	3.1
45	2n	11	LYS	3.1
51	1t	22	ARG	3.1
20	2Y	5	MET	3.1
51	1t	10	LEU	3.1
1	1A	2119	A	3.1
1	2A	652(T)	C	3.1
36	2e	13	ILE	3.1
40	2i	27	THR	3.1
45	2n	7	ILE	3.1
1	2A	2112	G	3.1
15	2T	66	VAL	3.1
26	24	56	VAL	3.1
7	2H	20	ALA	3.1
35	1d	73	ARG	3.1
49	1r	24	ALA	3.1
34	2c	43	LEU	3.1
32	2a	1040	U	3.1
45	2n	37	PHE	3.1
34	2c	193	TYR	3.1
40	2i	26	VAL	3.1
44	2m	76	ALA	3.1
50	2s	28	LYS	3.1
35	1d	76	ARG	3.1
45	2n	31	ARG	3.1
43	2l	64	TYR	3.1
3	1D	276	LYS	3.1
44	2m	110	ARG	3.1
41	1j	86	MET	3.1
53	2y	3	MET	3.1
1	2A	1079	C	3.1
32	1a	999	C	3.1
1	2A	1088	A	3.1
31	29	7	VAL	3.1
7	2H	157	TYR	3.1
32	1a	1021	G	3.1

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Mol	Chain	Res	Type	RSRZ
40	2i	10	ARG	3.1
1	2A	614(A)	U	3.1
1	2A	1041	C	3.1
6	2G	157	ILE	3.1
9	2N	92	ALA	3.1
40	1i	76	ALA	3.1
47	2p	47	ASP	3.0
6	2G	139	LEU	3.0
1	1A	1913	A	3.0
45	2n	56	VAL	3.0
40	2i	62	TYR	3.0
1	1A	2156	G	3.0
7	2H	97	ARG	3.0
7	2H	171	LEU	3.0
47	1p	73	LEU	3.0
50	1s	39	THR	3.0
43	2l	46	LYS	3.0
53	2y	43	LYS	3.0
53	2y	46	GLN	3.0
32	2a	1039	C	3.0
51	2t	26	ASN	3.0
1	1A	2167	U	3.0
35	2d	49	ARG	3.0
51	2t	25	ARG	3.0
1	2A	2182	G	3.0
34	1c	94	LEU	3.0
35	2d	158	ILE	3.0
39	1h	134	ILE	3.0
40	2i	81	ILE	3.0
1	2A	2122	U	3.0
1	2A	2167	U	3.0
34	2c	186	PHE	3.0
35	2d	3	ARG	3.0
38	2g	155	ARG	3.0
52	2u	22	ARG	3.0
33	1b	228	GLY	3.0
40	2i	115	GLY	3.0
47	1p	37	GLY	3.0
51	2t	54	LYS	3.0
52	1u	17	THR	3.0
35	2d	162	LEU	3.0
26	14	55	ARG	3.0

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Mol	Chain	Res	Type	RSRZ
50	2s	35	SER	3.0
32	2a	1452	C	3.0
40	1i	112	LYS	3.0
51	1t	45	GLN	3.0
51	1t	69	GLY	3.0
31	29	9	ARG	3.0
1	1A	2166	G	3.0
32	1a	1032	G	3.0
33	1b	165	VAL	3.0
45	2n	33	VAL	3.0
6	2G	173	LEU	2.9
33	1b	48	MET	2.9
34	2c	94	LEU	2.9
6	2G	58	GLN	2.9
1	2A	1056	G	2.9
1	1A	2164	C	2.9
32	1a	1020	U	2.9
53	2y	87	LYS	2.9
38	2g	9	VAL	2.9
53	2y	49	VAL	2.9
41	2j	48	THR	2.9
38	1g	85	TYR	2.9
14	2S	22	GLY	2.9
35	2d	6	GLY	2.9
1	1A	1055	G	2.9
1	2A	1082	U	2.9
1	2A	2190	G	2.9
53	1y	35	ILE	2.9
41	1j	46	ARG	2.9
32	1a	163	C	2.9
32	1a	1038	C	2.9
7	2H	88	LEU	2.9
11	2P	149	GLU	2.9
35	1d	179	GLU	2.9
43	1l	61	THR	2.9
48	1q	7	THR	2.9
40	2i	6	GLY	2.9
51	1t	83	ARG	2.9
47	1p	38	TYR	2.9
35	1d	209	ARG	2.9
39	1h	53	VAL	2.9
39	1h	93	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
50	2s	36	ARG	2.9
38	2g	82	GLY	2.9
1	1A	1847	A	2.9
53	1y	71	TYR	2.9
33	2b	232	PRO	2.9
34	1c	39	ILE	2.9
50	1s	40	ILE	2.9
6	2G	136	ARG	2.9
41	1j	5	ARG	2.9
1	1A	1100	C	2.9
14	2S	53	SER	2.9
40	2i	71	SER	2.9
11	2P	109	GLY	2.9
15	1T	37	GLY	2.9
22	10	8	GLY	2.9
32	1a	1009	G	2.9
34	2c	37	GLN	2.9
51	2t	42	GLN	2.9
3	2D	5	LYS	2.9
38	2g	25	ALA	2.9
53	2y	82	GLU	2.9
40	2i	91	ASP	2.9
44	1m	25	ILE	2.8
8	2I	19	VAL	2.8
8	2I	85	GLU	2.8
34	2c	153	VAL	2.8
41	2j	49	VAL	2.8
6	2G	57	ALA	2.8
41	1j	85	LEU	2.8
50	2s	12	ASP	2.8
51	1t	40	ALA	2.8
51	2t	28	ALA	2.8
32	1a	101	A	2.8
39	1h	98	LYS	2.8
40	2i	113	LYS	2.8
45	2n	8	GLU	2.8
7	2H	49	VAL	2.8
8	2I	107	VAL	2.8
35	2d	112	VAL	2.8
38	2g	118	VAL	2.8
26	14	68	ARG	2.8
34	2c	71	ALA	2.8

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Mol	Chain	Res	Type	RSRZ
40	2i	79	LEU	2.8
41	1j	68	HIS	2.8
44	1m	90	LEU	2.8
45	1n	30	ALA	2.8
1	2A	1057	A	2.8
34	2c	41	GLY	2.8
34	2c	184	TYR	2.8
45	1n	7	ILE	2.8
40	1i	10	ARG	2.8
1	2A	885	C	2.8
1	2A	1026	U	2.8
39	2h	98	LYS	2.8
34	2c	65	ALA	2.8
1	1A	2131	G	2.8
1	2A	1044	G	2.8
1	2A	1051	G	2.8
1	2A	2187	G	2.8
32	2a	1023	G	2.8
8	2I	86	THR	2.8
39	2h	45	ILE	2.8
40	1i	104	ARG	2.8
34	2c	35	GLU	2.8
41	2j	25	GLU	2.8
12	2Q	65	PHE	2.8
50	1s	67	VAL	2.8
41	2j	26	ALA	2.8
44	2m	75	ALA	2.8
45	1n	59	ALA	2.8
51	2t	62	LEU	2.8
1	2A	1089	G	2.8
35	2d	16	GLY	2.8
50	2s	8	GLY	2.8
51	2t	22	ARG	2.8
41	2j	15	THR	2.8
50	2s	64	GLU	2.8
51	1t	29	LYS	2.8
53	2y	53	THR	2.8
33	2b	223	ILE	2.8
38	2g	27	ILE	2.8
1	1A	2188	C	2.8
42	2k	117	ASN	2.8
45	1n	14	PRO	2.8

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Mol	Chain	Res	Type	RSRZ
29	27	1	MET	2.8
44	2m	13	LYS	2.8
48	1q	25	ARG	2.8
52	2u	9	ARG	2.8
53	1y	77	LEU	2.8
1	2A	614(B)	G	2.8
1	2A	2793	G	2.8
33	2b	37	ASN	2.8
7	2H	25	LYS	2.8
21	2Z	96	VAL	2.7
32	2a	174	C	2.7
33	2b	136	VAL	2.7
43	1l	43	VAL	2.7
35	1d	152	SER	2.7
1	2A	1081	U	2.7
1	1A	2157	G	2.7
32	1a	102	G	2.7
20	2Y	91	GLU	2.7
52	2u	5	ASP	2.7
40	1i	49	PRO	2.7
1	1A	271(K)	U	2.7
6	2G	37	VAL	2.7
30	28	22	VAL	2.7
40	2i	41	VAL	2.7
45	2n	16	PHE	2.7
34	2c	177	THR	2.7
52	2u	8	THR	2.7
29	17	47	ARG	2.7
51	1t	75	ASN	2.7
41	2j	36	GLY	2.7
48	1q	99	SER	2.7
52	2u	21	TYR	2.7
33	1b	218	ALA	2.7
40	2i	119	ALA	2.7
1	1A	886	C	2.7
6	2G	29	TRP	2.7
26	24	69	LYS	2.7
31	29	25	VAL	2.7
43	1l	47	LYS	2.7
43	2l	23	LYS	2.7
35	2d	202	LEU	2.7
7	2H	29	PRO	2.7

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Mol	Chain	Res	Type	RSRZ
1	2A	1070	A	2.7
6	2G	61	ALA	2.7
29	27	46	VAL	2.7
34	2c	195	VAL	2.7
35	1d	110	PHE	2.7
39	2h	31	PHE	2.7
51	1t	86	ARG	2.7
41	2j	69	ASN	2.7
46	2o	31	LEU	2.7
1	1A	2109	U	2.7
45	2n	4	LYS	2.7
52	1u	11	GLY	2.7
46	2o	87	ILE	2.7
1	2A	1042	G	2.7
33	2b	120	ALA	2.7
43	2l	89	ARG	2.7
53	2y	95	ARG	2.7
44	2m	106	ASN	2.7
7	2H	114	VAL	2.7
47	2p	9	PHE	2.7
14	2S	58	LEU	2.7
40	2i	47	LEU	2.7
53	2y	62	VAL	2.7
32	1a	63	C	2.7
45	1n	61	TRP	2.7
35	1d	69	GLY	2.7
40	1i	30	GLY	2.7
33	2b	144	ARG	2.7
51	1t	55	ILE	2.7
6	2G	49	ASP	2.7
34	2c	61	ALA	2.7
53	2y	58	ASN	2.7
1	2A	1098	A	2.7
34	1c	201	TYR	2.7
40	1i	114	TYR	2.7
41	2j	84	GLN	2.7
21	2Z	100	VAL	2.7
33	2b	65	GLY	2.7
47	1p	46	PRO	2.6
48	1q	97	SER	2.6
6	2G	75	LYS	2.6
7	2H	4	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
40	2i	43	ALA	2.6
41	2j	13	HIS	2.6
6	2G	19	LEU	2.6
32	1a	151	A	2.6
34	2c	42	LEU	2.6
34	2c	85	ARG	2.6
35	2d	23	GLY	2.6
35	2d	140	VAL	2.6
49	2r	29	PHE	2.6
32	1a	201	C	2.6
34	2c	199	LYS	2.6
29	17	23	ARG	2.6
48	1q	63	ARG	2.6
1	1A	2160	G	2.6
8	2I	31	LEU	2.6
19	2X	92	LEU	2.6
21	1Z	203	GLU	2.6
34	2c	143	GLU	2.6
40	2i	103	THR	2.6
23	21	78	LYS	2.6
26	24	59	PHE	2.6
36	2e	12	LEU	2.6
47	1p	6	LEU	2.6
1	2A	890	A	2.6
32	1a	152	A	2.6
50	1s	60	VAL	2.6
33	2b	48	MET	2.6
47	2p	1	MET	2.6
1	2A	2183	C	2.6
1	1A	2172	U	2.6
32	2a	202	U	2.6
34	2c	32	LEU	2.6
35	1d	75	PHE	2.6
36	2e	45	PHE	2.6
40	2i	124	GLN	2.6
1	2A	1106	G	2.6
1	1A	2137	C	2.6
1	1A	2163	C	2.6
6	1G	2	PRO	2.6
32	1a	105	G	2.6
32	1a	630	G	2.6
52	1u	6	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
20	2Y	75	ILE	2.6
38	2g	156	TRP	2.6
51	1t	41	ILE	2.6
52	1u	16	GLY	2.6
45	1n	22	THR	2.6
6	2G	133	LEU	2.6
40	1i	19	LEU	2.6
6	2G	25	TYR	2.6
7	2H	19	VAL	2.6
14	2S	92	TYR	2.6
45	1n	25	VAL	2.6
15	2T	115	ARG	2.6
43	1l	89	ARG	2.6
1	2A	2104	G	2.6
1	2A	2163	C	2.6
32	1a	1019	C	2.6
32	2a	1024	G	2.6
34	2c	158	GLY	2.6
41	2j	60	ARG	2.6
7	2H	71	LEU	2.6
34	1c	47	LEU	2.6
35	2d	56	VAL	2.6
7	2H	94	TYR	2.6
32	1a	1044	A	2.6
51	2t	66	ALA	2.6
40	1i	11	LYS	2.6
51	1t	63	ILE	2.6
8	1I	86	THR	2.5
34	1c	85	ARG	2.5
51	1t	17	ARG	2.5
6	2G	142	PRO	2.5
44	2m	113	PRO	2.5
35	2d	96	LEU	2.5
41	2j	90	LEU	2.5
47	1p	49	LEU	2.5
1	2A	2180	U	2.5
6	2G	92	VAL	2.5
40	1i	17	VAL	2.5
8	2I	20	ASP	2.5
1	2A	645	C	2.5
48	1q	86	GLU	2.5
1	2A	1087	G	2.5

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Mol	Chain	Res	Type	RSRZ
8	2I	61	ARG	2.5
46	1o	88	ARG	2.5
53	2y	7	SER	2.5
50	1s	77	THR	2.5
7	2H	116	GLU	2.5
35	2d	134	ASP	2.5
53	2y	84	GLN	2.5
15	2T	114	LEU	2.5
33	2b	181	PHE	2.5
35	1d	79	PHE	2.5
35	2d	198	VAL	2.5
42	2k	30	VAL	2.5
51	2t	7	LYS	2.5
44	2m	24	GLY	2.5
40	2i	83	ARG	2.5
45	2n	41	ARG	2.5
32	2a	1008	C	2.5
53	2y	50	ALA	2.5
1	2A	2833	G	2.5
32	2a	1068	G	2.5
32	2a	1224	G	2.5
33	1b	214	ILE	2.5
7	2H	55	PRO	2.5
32	1a	1446	U	2.5
40	2i	73	GLN	2.5
43	2l	16	GLU	2.5
50	2s	70	LYS	2.5
7	2H	93	GLY	2.5
36	2e	43	LEU	2.5
38	1g	12	LEU	2.5
41	2j	31	GLY	2.5
50	2s	74	PHE	2.5
32	1a	197	A	2.5
8	2I	93	THR	2.5
32	2a	1025	U	2.5
43	2l	28	LYS	2.5
1	1A	2187	G	2.5
1	2A	1816	G	2.5
14	2S	35	ILE	2.5
44	2m	84	ILE	2.5
40	2i	111	ARG	2.5
33	2b	227	GLY	2.5

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Mol	Chain	Res	Type	RSRZ
4	1E	195	LEU	2.5
35	1d	78	LEU	2.5
35	1d	186	LEU	2.5
45	2n	44	LEU	2.5
8	2I	18	VAL	2.5
40	1i	59	PHE	2.5
8	2I	89	TYR	2.5
32	1a	71	C	2.5
32	1a	1007	C	2.5
15	2T	112	ARG	2.5
32	1a	161	A	2.5
40	1i	66	ARG	2.5
52	1u	15	ARG	2.5
43	2l	100	ILE	2.5
1	2A	2184	G	2.5
8	2I	44	LEU	2.5
35	2d	85	LYS	2.5
11	2P	71	VAL	2.5
40	2i	33	PHE	2.5
40	2i	9	ARG	2.5
50	2s	3	ARG	2.5
52	1u	22	ARG	2.5
26	14	57	GLU	2.5
7	2H	72	ILE	2.5
12	2Q	66	ILE	2.5
20	2Y	81	LYS	2.5
23	21	7	ILE	2.5
41	1j	96	ILE	2.5
44	2m	89	GLY	2.5
53	2y	92	GLY	2.5
1	1A	2106	G	2.5
8	1I	110	ASP	2.5
34	2c	47	LEU	2.5
51	2t	11	SER	2.4
35	1d	50	ARG	2.4
36	1e	90	VAL	2.4
50	1s	9	VAL	2.4
21	2Z	2	GLU	2.4
32	1a	479	C	2.4
32	2a	1223	C	2.4
46	1o	2	PRO	2.4
51	2t	34	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
51	2t	38	LYS	2.4
7	2H	151	ILE	2.4
40	2i	77	ILE	2.4
1	1A	2162	G	2.4
1	2A	1115	G	2.4
6	2G	51	ARG	2.4
44	1m	48	LEU	2.4
53	2y	24	LEU	2.4
40	2i	59	PHE	2.4
41	1j	49	VAL	2.4
34	1c	63	ASN	2.4
34	2c	162	GLN	2.4
40	1i	80	GLY	2.4
52	2u	11	GLY	2.4
34	2c	127	ARG	2.4
3	2D	38	LYS	2.4
7	2H	130	ARG	2.4
44	1m	114	ARG	2.4
34	2c	48	TYR	2.4
45	2n	50	LYS	2.4
5	2F	64	ILE	2.4
34	2c	57	ILE	2.4
35	2d	67	ILE	2.4
47	1p	36	ILE	2.4
35	2d	188	LEU	2.4
6	2G	134	GLY	2.4
10	2O	51	ALA	2.4
32	1a	90	U	2.4
32	2a	1150	U	2.4
30	28	23	VAL	2.4
43	2l	5	PRO	2.4
39	1h	102	ARG	2.4
47	2p	20	VAL	2.4
50	2s	79	THR	2.4
52	1u	3	LYS	2.4
53	1y	2	THR	2.4
1	2A	2103	C	2.4
1	2A	2804	C	2.4
32	1a	1039	C	2.4
32	1a	1043	C	2.4
32	2a	1149	C	2.4
36	2e	133	TYR	2.4

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Mol	Chain	Res	Type	RSRZ
52	1u	13	ILE	2.4
1	1A	1175	U	2.4
7	2H	34	GLU	2.4
32	1a	202	U	2.4
6	2G	103	LEU	2.4
20	1Y	67	LEU	2.4
32	2a	1004	A	2.4
11	1P	127	ALA	2.4
11	2P	15	ARG	2.4
11	2P	79	ARG	2.4
35	1d	23	GLY	2.4
39	1h	128	GLY	2.4
40	1i	8	GLY	2.4
40	1i	106	ALA	2.4
41	1j	20	ALA	2.4
6	2G	117	PHE	2.4
44	2m	17	VAL	2.4
1	1A	2111	C	2.4
1	2A	886	C	2.4
7	2H	104	GLU	2.4
36	2e	20	GLN	2.4
10	2O	69	ILE	2.4
34	2c	201	TYR	2.4
13	2R	68	ARG	2.4
15	1T	115	ARG	2.4
46	1o	68	ARG	2.4
8	2I	5	LEU	2.4
20	2Y	90	LEU	2.4
47	2p	49	LEU	2.4
48	1q	45	HIS	2.4
7	2H	150	ALA	2.4
32	2a	1236	A	2.4
35	1d	111	ALA	2.4
35	2d	181	MET	2.4
47	2p	7	ALA	2.4
26	14	50	VAL	2.4
34	2c	89	GLU	2.4
35	1d	170	VAL	2.4
47	1p	76	GLN	2.4
53	2y	79	ASN	2.4
32	2a	1019	C	2.3
51	1t	79	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
51	1t	100	ILE	2.3
33	1b	213	LEU	2.3
53	1y	45	PRO	2.3
26	24	44	THR	2.3
45	2n	58	LYS	2.3
7	2H	26	VAL	2.3
18	2W	50	VAL	2.3
29	17	46	VAL	2.3
35	1d	105	VAL	2.3
40	2i	53	VAL	2.3
38	2g	6	ARG	2.3
42	2k	125	PHE	2.3
47	2p	57	ARG	2.3
32	1a	306	G	2.3
32	1a	76	C	2.3
34	2c	145	GLY	2.3
35	1d	124	GLY	2.3
6	2G	63	ILE	2.3
53	2y	74	ILE	2.3
9	2N	104	LYS	2.3
14	2S	56	LEU	2.3
33	1b	133	LYS	2.3
41	2j	37	PRO	2.3
43	2l	56	ALA	2.3
48	1q	84	LEU	2.3
4	2E	168	MET	2.3
6	2G	108	ASN	2.3
14	2S	17	ARG	2.3
6	2G	178	PHE	2.3
38	1g	80	VAL	2.3
1	2A	34	C	2.3
32	2a	1363	C	2.3
38	2g	36	LYS	2.3
19	1X	8	ILE	2.3
35	2d	120	LEU	2.3
47	1p	57	ARG	2.3
47	1p	81	ARG	2.3
50	1s	20	LEU	2.3
52	2u	17	THR	2.3
1	1A	1084	A	2.3
14	2S	33	LYS	2.3
36	1e	22	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
40	2i	101	PHE	2.3
33	2b	146	GLN	2.3
45	2n	52	GLN	2.3
51	1t	16	HIS	2.3
32	1a	68	G	2.3
14	2S	20	ARG	2.3
35	2d	100	ARG	2.3
41	1j	98	ILE	2.3
47	1p	4	ILE	2.3
6	1G	73	ALA	2.3
7	2H	57	ASP	2.3
16	2U	41	ALA	2.3
26	14	53	GLU	2.3
40	1i	105	ASP	2.3
48	1q	78	GLU	2.3
53	2y	69	ASP	2.3
6	1G	152	LEU	2.3
21	2Z	3	TYR	2.3
33	2b	31	TYR	2.3
44	2m	23	TYR	2.3
46	1o	56	LEU	2.3
4	2E	1	MET	2.3
9	2N	84	LYS	2.3
38	1g	13	GLN	2.3
43	2l	29	GLY	2.3
47	1p	21	VAL	2.3
1	1A	1026	U	2.3
32	2a	1358	U	2.3
50	1s	59	PRO	2.3
1	1A	2120	G	2.3
7	1H	92	ILE	2.3
32	1a	184	G	2.3
32	1a	457	C	2.3
32	2a	979	C	2.3
32	2a	1038	C	2.3
22	20	46	LYS	2.3
33	2b	185	ILE	2.3
40	2i	70	LYS	2.3
22	10	43	THR	2.3
44	2m	70	LEU	2.3
53	1y	42	SER	2.3
53	2y	56	THR	2.3

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Mol	Chain	Res	Type	RSRZ
44	1m	23	TYR	2.3
47	2p	39	TYR	2.3
32	2a	1446	U	2.3
35	2d	122	ARG	2.3
44	1m	91	ARG	2.3
45	1n	8	GLU	2.3
51	1t	80	ARG	2.3
6	2G	159	VAL	2.3
7	2H	99	VAL	2.3
32	2a	60	A	2.3
33	2b	165	VAL	2.3
47	1p	20	VAL	2.3
31	29	13	LYS	2.3
48	1q	14	LYS	2.3
32	1a	1137	C	2.3
33	2b	39	ILE	2.3
1	2A	2805	G	2.3
32	2a	216	G	2.3
32	2a	1202	G	2.3
40	1i	43	ALA	2.3
40	2i	106	ALA	2.3
51	1t	32	ALA	2.3
35	2d	78	LEU	2.2
20	2Y	80	GLY	2.2
26	14	54	GLY	2.2
44	1m	108	ARG	2.2
48	1q	91	ARG	2.2
50	2s	26	GLY	2.2
7	2H	164	TYR	2.2
43	1l	20	LYS	2.2
4	2E	59	VAL	2.2
6	2G	80	PHE	2.2
35	2d	75	PHE	2.2
47	2p	62	VAL	2.2
48	1q	11	VAL	2.2
48	2q	10	VAL	2.2
7	2H	16	SER	2.2
34	2c	154	SER	2.2
41	1j	59	SER	2.2
1	1A	1914	C	2.2
19	2X	60	ARG	2.2
33	2b	182	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
34	2c	149	ALA	2.2
35	2d	115	ARG	2.2
38	1g	39	ALA	2.2
42	2k	126	ARG	2.2
51	1t	59	ALA	2.2
35	2d	64	LEU	2.2
37	2f	45	LEU	2.2
8	1I	89	TYR	2.2
33	2b	92	TYR	2.2
35	2d	27	TYR	2.2
44	2m	82	MET	2.2
48	2q	51	TYR	2.2
40	1i	109	VAL	2.2
44	1m	117	VAL	2.2
1	2A	529	A	2.2
1	2A	1096	A	2.2
1	2A	271(K)	U	2.2
21	2Z	171	ILE	2.2
45	2n	30	ALA	2.2
51	2t	59	ALA	2.2
35	1d	194	LEU	2.2
53	1y	19	HIS	2.2
1	2A	1059	G	2.2
1	2A	2192	G	2.2
39	1h	58	TYR	2.2
42	2k	75	TYR	2.2
43	2l	120	TYR	2.2
45	2n	46	GLU	2.2
44	1m	97	PRO	2.2
1	1A	1963	U	2.2
1	1A	2118	U	2.2
31	19	7	VAL	2.2
47	1p	62	VAL	2.2
6	2G	141	PHE	2.2
41	1j	47	PHE	2.2
1	1A	2171	A	2.2
34	1c	41	GLY	2.2
4	1E	28	ALA	2.2
29	27	45	ALA	2.2
34	1c	60	ALA	2.2
38	2g	24	THR	2.2
50	2s	75	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
19	2X	66	LEU	2.2
44	2m	90	LEU	2.2
51	2t	13	LEU	2.2
31	29	15	LYS	2.2
11	2P	110	TYR	2.2
6	2G	149	VAL	2.2
7	2H	169	VAL	2.2
34	1c	195	VAL	2.2
37	1f	88	VAL	2.2
48	1q	23	VAL	2.2
36	2e	84	PHE	2.2
41	2j	11	PHE	2.2
50	1s	74	PHE	2.2
51	1t	64	ASP	2.2
53	2y	47	GLY	2.2
21	2Z	193	GLU	2.2
6	2G	161	THR	2.2
38	2g	116	ALA	2.2
41	1j	32	ALA	2.2
46	1o	82	ILE	2.2
1	2A	1100	C	2.2
7	2H	27	LYS	2.2
3	2D	37	LEU	2.2
32	2a	470	C	2.2
41	2j	70	ARG	2.2
47	2p	6	LEU	2.2
32	1a	199	G	2.2
13	2R	21	TYR	2.2
23	21	71	TYR	2.2
26	24	43	TYR	2.2
33	1b	126	GLU	2.2
33	2b	109	SER	2.2
35	1d	130	GLY	2.2
39	2h	4	ASP	2.2
5	1F	36	VAL	2.2
4	2E	28	ALA	2.2
12	2Q	121	ALA	2.2
15	2T	113	LYS	2.2
1	2A	2062	A	2.2
32	1a	134	A	2.2
32	1a	1357	A	2.2
1	1A	272(A)	U	2.2

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Mol	Chain	Res	Type	RSRZ
6	2G	144	ILE	2.2
32	1a	203	U	2.2
51	2t	100	ILE	2.2
6	2G	94	LEU	2.2
8	2I	12	LEU	2.2
32	1a	1008	C	2.2
32	2a	995	C	2.2
39	1h	10	LEU	2.2
40	1i	50	LEU	2.2
35	2d	163	GLU	2.2
26	24	7	PRO	2.2
35	2d	165	MET	2.2
41	1j	41	PRO	2.2
42	2k	115	PRO	2.2
43	1l	22	SER	2.2
50	1s	4	SER	2.2
32	2a	78	G	2.1
32	2a	1022	G	2.1
40	2i	117	HIS	2.1
45	2n	23	ARG	2.1
3	2D	50	THR	2.1
3	2D	272	ALA	2.1
32	1a	1212	U	2.1
34	1c	160	ALA	2.1
30	28	41	ILE	2.1
36	2e	109	ILE	2.1
40	1i	81	ILE	2.1
1	1A	34	C	2.1
26	14	51	ASP	2.1
26	24	39	CYS	2.1
39	1h	2	LEU	2.1
41	2j	88	LEU	2.1
30	28	37	SER	2.1
33	1b	234	PRO	2.1
53	1y	46	GLN	2.1
38	1g	78	ARG	2.1
44	1m	110	ARG	2.1
44	2m	88	ARG	2.1
1	1A	2181	G	2.1
1	2A	1068	G	2.1
4	2E	196	VAL	2.1
32	1a	216	G	2.1

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Mol	Chain	Res	Type	RSRZ
47	2p	38	TYR	2.1
53	1y	44	GLU	2.1
53	1y	49	VAL	2.1
5	1F	83	PHE	2.1
12	2Q	20	ALA	2.1
14	1S	51	ALA	2.1
33	2b	70	PHE	2.1
33	2b	207	ALA	2.1
34	1c	168	ALA	2.1
37	1f	55	ASP	2.1
41	2j	17	ASP	2.1
1	1A	2135	A	2.1
32	1a	171	A	2.1
3	2D	206	LEU	2.1
8	2I	38	LEU	2.1
12	2Q	34	LEU	2.1
35	1d	174	LEU	2.1
39	1h	112	LEU	2.1
6	2G	85	GLY	2.1
32	2a	1260	C	2.1
40	1i	51	ARG	2.1
40	1i	83	ARG	2.1
1	2A	1060	U	2.1
7	2H	13	LYS	2.1
7	2H	62	LYS	2.1
8	2I	37	VAL	2.1
9	2N	140	VAL	2.1
11	2P	134	ALA	2.1
17	2V	92	THR	2.1
33	2b	47	THR	2.1
43	2l	47	LYS	2.1
36	1e	6	PHE	2.1
50	2s	13	ASP	2.1
53	2y	89	GLN	2.1
4	2E	77	ILE	2.1
35	2d	180	GLY	2.1
41	2j	41	PRO	2.1
43	1l	25	PRO	2.1
53	1y	40	ILE	2.1
1	1A	887	A	2.1
3	2D	147	LEU	2.1
6	1G	82	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	315	A	2.1
32	2a	1000	U	2.1
38	2g	144	MET	2.1
35	1d	166	LYS	2.1
40	1i	127	LYS	2.1
34	1c	167	TRP	2.1
7	2H	52	VAL	2.1
18	1W	32	ALA	2.1
39	1h	110	ALA	2.1
43	1l	55	VAL	2.1
47	1p	58	TYR	2.1
49	1r	73	ALA	2.1
50	2s	58	VAL	2.1
53	1y	63	ALA	2.1
23	1l	60	PHE	2.1
1	1A	171	G	2.1
32	2a	631	G	2.1
7	2H	21	PRO	2.1
6	2G	88	ILE	2.1
53	1y	16	ILE	2.1
43	1l	46	LYS	2.1
51	1t	65	LYS	2.1
53	1y	41	LEU	2.1
32	1a	389	A	2.1
7	2H	18	GLU	2.1
33	1b	231	GLU	2.1
47	2p	18	ARG	2.1
53	2y	15	ALA	2.1
1	2A	958	U	2.1
11	2P	118	GLY	2.1
34	1c	10	PHE	2.1
1	1A	2184	G	2.1
7	2H	8	PRO	2.1
7	2H	36	PRO	2.1
32	2a	394	G	2.1
41	2j	77	PRO	2.1
15	1T	114	LEU	2.1
39	2h	112	LEU	2.1
48	1q	36	ILE	2.1
1	1A	885	C	2.1
1	2A	1847	A	2.1
2	1B	88	C	2.1

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Mol	Chain	Res	Type	RSRZ
22	20	11	ARG	2.1
32	1a	840	C	2.1
36	2e	64	ARG	2.1
38	1g	155	ARG	2.1
47	1p	25	ARG	2.1
19	1X	4	ALA	2.1
21	2Z	182	LYS	2.1
35	2d	169	LYS	2.1
53	2y	72	THR	2.1
38	2g	7	ALA	2.1
43	2l	51	ALA	2.1
51	2t	32	ALA	2.1
31	29	23	VAL	2.1
34	2c	66	VAL	2.1
4	2E	151	TYR	2.1
33	1b	131	PRO	2.1
10	2O	90	GLN	2.0
7	2H	51	ARG	2.0
11	2P	102	ARG	2.0
31	29	19	ARG	2.0
32	2a	1009	G	2.0
34	2c	140	ARG	2.0
34	2c	202	ILE	2.0
38	1g	76	ARG	2.0
50	1s	29	ARG	2.0
53	1y	83	ARG	2.0
1	2A	2185	C	2.0
32	1a	221	C	2.0
32	1a	1041	A	2.0
32	1a	1306	A	2.0
32	2a	1157	A	2.0
32	2a	1219	U	2.0
41	2j	100	THR	2.0
35	1d	180	GLY	2.0
44	1m	30	ALA	2.0
7	2H	107	VAL	2.0
9	1N	14	VAL	2.0
17	2V	79	VAL	2.0
21	2Z	58	VAL	2.0
36	1e	20	GLN	2.0
12	2Q	5	ARG	2.0
14	2S	36	TYR	2.0

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Mol	Chain	Res	Type	RSRZ
16	1U	69	CYS	2.0
34	2c	126	ARG	2.0
7	2H	33	LEU	2.0
15	2T	48	ILE	2.0
34	1c	91	LEU	2.0
35	2d	58	LEU	2.0
1	2A	1097	U	2.0
32	1a	1017	G	2.0
34	2c	3	ASN	2.0
53	1y	70	MET	2.0
1	1A	2128	C	2.0
7	2H	167	GLU	2.0
32	1a	91	C	2.0
1	1A	2062	A	2.0
23	11	35	THR	2.0
32	1a	1531	A	2.0
34	1c	89	GLU	2.0
51	2t	19	SER	2.0
33	2b	30	ARG	2.0
34	2c	164	ARG	2.0
35	2d	7	PRO	2.0
38	2g	33	ASP	2.0
4	1E	7	VAL	2.0
34	2c	198	VAL	2.0
41	1j	72	VAL	2.0
51	1t	14	LYS	2.0
1	2A	272(A)	U	2.0
1	2A	1090	U	2.0
28	26	42	TRP	2.0
34	2c	22	TRP	2.0
6	2G	77	ILE	2.0
6	2G	140	ILE	2.0
18	1W	95	ILE	2.0
21	2Z	133	ILE	2.0
30	28	60	LEU	2.0
43	1l	52	LEU	2.0
51	1t	53	LEU	2.0
51	1t	84	LEU	2.0
51	2t	72	LEU	2.0
53	2y	76	GLU	2.0
21	2Z	50	GLN	2.0
32	1a	1042	G	2.0

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Mol	Chain	Res	Type	RSRZ
32	2a	102	G	2.0
34	2c	104	GLN	2.0
2	2B	88	C	2.0
29	27	41	ARG	2.0
32	1a	72	C	2.0
38	2g	121	ALA	2.0
40	1i	113	LYS	2.0
41	2j	43	ARG	2.0
40	2i	55	ALA	2.0
42	1k	60	ALA	2.0
53	2y	91	LYS	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
43	0TD	2l	92	10/11	0.87	0.16	62,69,72,79	0
1	5MU	1A	1915	21/22	0.88	0.17	72,80,85,91	0
32	2MG	2a	1207	24/25	0.89	0.19	79,85,90,93	0
1	5MU	2A	1915	21/22	0.90	0.10	75,83,86,99	0
32	5MC	2a	967	21/22	0.92	0.16	66,72,81,88	0
1	PSU	2A	1911	20/21	0.92	0.13	68,73,78,83	0
32	M2G	2a	966	25/26	0.92	0.16	60,72,82,86	0
1	PSU	2A	1917	20/21	0.93	0.14	72,76,89,91	0
43	0TD	1l	92	10/11	0.94	0.16	53,61,68,72	0
1	PSU	1A	1917	20/21	0.94	0.17	66,72,79,82	0
32	PSU	2a	516	20/21	0.95	0.12	71,75,79,82	0
1	PSU	1A	1911	20/21	0.95	0.13	62,67,74,76	0
32	PSU	1a	516	20/21	0.95	0.14	57,67,70,71	0
32	M2G	1a	966	25/26	0.95	0.17	55,63,69,74	0
32	5MC	2a	1404	21/22	0.95	0.17	55,60,65,67	0
32	5MC	1a	967	21/22	0.95	0.17	60,67,74,78	0
32	4OC	2a	1402	22/23	0.96	0.15	59,65,71,75	0
1	OMC	2A	1920	21/22	0.96	0.14	62,68,73,74	0
32	5MC	2a	1407	21/22	0.96	0.14	55,63,68,70	0
32	MA6	2a	1518	24/25	0.96	0.16	54,62,67,70	0
32	5MC	2a	1400	21/22	0.96	0.24	63,69,72,75	0
32	UR3	1a	1498	21/22	0.97	0.16	48,53,56,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	G7M	2a	527	24/25	0.97	0.15	62,68,73,75	0
32	MA6	1a	1518	24/25	0.97	0.17	43,51,54,58	0
32	MA6	1a	1519	24/25	0.97	0.20	43,51,56,57	0
32	G7M	1a	527	24/25	0.97	0.19	46,57,62,64	0
32	2MG	1a	1207	24/25	0.97	0.14	65,72,75,76	0
32	5MC	1a	1400	21/22	0.97	0.17	52,57,62,63	0
32	4OC	1a	1402	22/23	0.97	0.17	50,55,57,68	0
32	5MC	1a	1404	21/22	0.97	0.18	43,49,53,55	0
32	UR3	2a	1498	21/22	0.97	0.17	58,63,66,68	0
1	5MC	2A	1962	21/22	0.97	0.16	42,48,54,64	0
32	MA6	2a	1519	24/25	0.97	0.20	55,61,65,66	0
1	OMG	2A	2251	24/25	0.97	0.17	40,44,47,49	0
1	OMC	1A	1920	21/22	0.98	0.19	52,60,63,64	0
1	5MU	1A	1939	21/22	0.98	0.19	26,33,35,36	0
32	5MC	1a	1407	21/22	0.98	0.16	47,56,59,64	0
1	5MC	1A	1942	21/22	0.98	0.16	36,42,44,50	0
1	5MU	2A	1939	21/22	0.98	0.17	34,39,42,47	0
1	5MC	2A	1942	21/22	0.98	0.16	47,53,57,59	0
1	5MC	1A	1962	21/22	0.98	0.18	33,40,44,47	0
1	OMG	1A	2251	24/25	0.98	0.21	25,32,39,40	0
1	2MA	2A	2503	23/24	0.98	0.18	33,39,43,47	0
1	OMU	2A	2552	21/22	0.98	0.18	37,43,46,47	0
1	PSU	2A	2605	20/21	0.98	0.17	36,39,46,48	0
1	OMU	1A	2552	21/22	0.98	0.19	29,34,37,39	0
1	PSU	1A	2605	20/21	0.99	0.18	26,31,34,42	0
1	2MA	1A	2503	23/24	0.99	0.21	22,28,29,32	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3625	1/1	0.13	0.19	84,84,84,84	0
54	MG	1A	3283	1/1	0.41	0.15	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3946	1/1	0.42	0.19	41,41,41,41	0
54	MG	2A	3530	1/1	0.42	0.17	49,49,49,49	0
54	MG	1A	3607	1/1	0.44	0.21	54,54,54,54	0
54	MG	1a	1854	1/1	0.44	0.11	75,75,75,75	0
54	MG	2A	3464	1/1	0.44	0.40	69,69,69,69	0
54	MG	1A	3805	1/1	0.44	0.15	62,62,62,62	0
54	MG	1A	3370	1/1	0.45	0.23	65,65,65,65	0
54	MG	2a	3008	1/1	0.45	0.22	80,80,80,80	0
54	MG	1a	1728	1/1	0.46	0.19	63,63,63,63	0
54	MG	1a	1759	1/1	0.49	0.15	82,82,82,82	0
54	MG	1A	3763	1/1	0.49	0.35	60,60,60,60	0
54	MG	2A	3001	1/1	0.49	0.24	62,62,62,62	0
54	MG	1A	3494	1/1	0.50	0.16	55,55,55,55	0
54	MG	2A	3295	1/1	0.51	0.16	72,72,72,72	0
54	MG	1A	3450	1/1	0.53	0.15	58,58,58,58	0
54	MG	1A	3854	1/1	0.54	0.31	51,51,51,51	0
54	MG	1A	3771	1/1	0.55	0.11	55,55,55,55	0
54	MG	1a	1853	1/1	0.55	0.14	77,77,77,77	0
54	MG	1a	1740	1/1	0.56	0.26	93,93,93,93	0
54	MG	2A	3024	1/1	0.56	0.21	64,64,64,64	0
54	MG	2A	3531	1/1	0.56	0.12	47,47,47,47	0
54	MG	2A	3717	1/1	0.56	0.19	88,88,88,88	0
54	MG	1A	3293	1/1	0.56	0.38	65,65,65,65	0
54	MG	2a	3119	1/1	0.56	0.19	93,93,93,93	0
54	MG	1A	3981	1/1	0.57	0.15	43,43,43,43	0
54	MG	1A	3423	1/1	0.57	0.12	51,51,51,51	0
54	MG	2A	3641	1/1	0.57	0.26	53,53,53,53	0
54	MG	1a	1785	1/1	0.58	0.18	79,79,79,79	0
54	MG	1A	3566	1/1	0.58	0.29	43,43,43,43	0
54	MG	2A	3690	1/1	0.58	0.09	62,62,62,62	0
54	MG	2A	3391	1/1	0.59	0.13	66,66,66,66	0
54	MG	1A	3518	1/1	0.59	0.17	51,51,51,51	0
54	MG	2A	3704	1/1	0.59	0.13	69,69,69,69	0
54	MG	1A	3549	1/1	0.60	0.07	65,65,65,65	0
54	MG	2A	3331	1/1	0.60	0.11	52,52,52,52	0
54	MG	2B	215	1/1	0.60	0.28	84,84,84,84	0
54	MG	1A	3768	1/1	0.60	0.16	67,67,67,67	0
54	MG	1A	3421	1/1	0.60	0.21	38,38,38,38	0
54	MG	1A	3508	1/1	0.61	0.10	57,57,57,57	0
54	MG	1A	3732	1/1	0.62	0.08	55,55,55,55	0
54	MG	1A	3912	1/1	0.62	0.16	70,70,70,70	0
54	MG	1o	102	1/1	0.62	0.09	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3362	1/1	0.63	0.10	73,73,73,73	0
54	MG	2A	3666	1/1	0.63	0.18	77,77,77,77	0
54	MG	2A	3454	1/1	0.64	0.20	67,67,67,67	0
54	MG	1a	1746	1/1	0.64	0.13	60,60,60,60	0
54	MG	2A	3332	1/1	0.64	0.12	48,48,48,48	0
54	MG	1A	3680	1/1	0.64	0.42	61,61,61,61	0
54	MG	1A	3569	1/1	0.64	0.08	55,55,55,55	0
54	MG	2A	3452	1/1	0.64	0.14	82,82,82,82	0
54	MG	1A	3815	1/1	0.65	0.18	61,61,61,61	0
54	MG	1a	1607	1/1	0.65	0.10	71,71,71,71	0
54	MG	1A	3426	1/1	0.65	0.11	68,68,68,68	0
54	MG	1A	3285	1/1	0.65	0.10	90,90,90,90	0
54	MG	2a	3082	1/1	0.65	0.20	68,68,68,68	0
54	MG	1A	3515	1/1	0.65	0.13	65,65,65,65	0
54	MG	2a	3136	1/1	0.65	0.12	57,57,57,57	0
54	MG	1a	1787	1/1	0.66	0.15	61,61,61,61	0
54	MG	1a	1788	1/1	0.66	0.11	75,75,75,75	0
54	MG	1a	1676	1/1	0.66	0.10	83,83,83,83	0
54	MG	2A	3658	1/1	0.66	0.14	71,71,71,71	0
54	MG	2a	3069	1/1	0.66	0.15	68,68,68,68	0
54	MG	1A	3696	1/1	0.66	0.14	51,51,51,51	0
54	MG	2a	3111	1/1	0.66	0.14	78,78,78,78	0
54	MG	1a	1673	1/1	0.66	0.14	58,58,58,58	0
54	MG	2A	3696	1/1	0.66	0.10	84,84,84,84	0
54	MG	1A	3125	1/1	0.67	0.26	59,59,59,59	0
54	MG	1a	1790	1/1	0.67	0.18	70,70,70,70	0
54	MG	1a	1834	1/1	0.67	0.17	68,68,68,68	0
54	MG	1A	3747	1/1	0.67	0.12	47,47,47,47	0
54	MG	2A	3670	1/1	0.68	0.19	84,84,84,84	0
54	MG	1A	3446	1/1	0.68	0.11	57,57,57,57	0
54	MG	1A	3608	1/1	0.68	0.12	65,65,65,65	0
54	MG	2a	3155	1/1	0.68	0.12	95,95,95,95	0
54	MG	2A	3586	1/1	0.69	0.09	72,72,72,72	0
54	MG	1A	3579	1/1	0.69	0.16	69,69,69,69	0
54	MG	2A	3657	1/1	0.69	0.21	68,68,68,68	0
54	MG	2a	3005	1/1	0.69	0.15	69,69,69,69	0
54	MG	1A	3152	1/1	0.69	0.23	57,57,57,57	0
54	MG	2A	3661	1/1	0.69	0.17	74,74,74,74	0
54	MG	1A	3255	1/1	0.69	0.15	66,66,66,66	0
54	MG	2A	3486	1/1	0.69	0.07	74,74,74,74	0
54	MG	1A	3937	1/1	0.69	0.43	70,70,70,70	0
54	MG	2A	3444	1/1	0.69	0.19	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3702	1/1	0.69	0.24	79,79,79,79	0
54	MG	1A	3903	1/1	0.70	0.10	62,62,62,62	0
54	MG	2A	3683	1/1	0.70	0.15	72,72,72,72	0
54	MG	1a	1831	1/1	0.70	0.10	55,55,55,55	0
54	MG	1A	3445	1/1	0.70	0.20	55,55,55,55	0
54	MG	1a	1841	1/1	0.70	0.23	70,70,70,70	0
54	MG	1A	3533	1/1	0.70	0.13	59,59,59,59	0
54	MG	1A	3945	1/1	0.70	0.17	63,63,63,63	0
54	MG	2A	3510	1/1	0.70	0.09	57,57,57,57	0
54	MG	1a	1751	1/1	0.70	0.15	82,82,82,82	0
54	MG	1a	1752	1/1	0.70	0.08	59,59,59,59	0
54	MG	1A	3297	1/1	0.70	0.23	68,68,68,68	0
54	MG	1a	1782	1/1	0.70	0.11	86,86,86,86	0
54	MG	2A	3302	1/1	0.70	0.11	65,65,65,65	0
54	MG	1A	3562	1/1	0.70	0.23	58,58,58,58	0
54	MG	1A	3884	1/1	0.70	0.06	56,56,56,56	0
54	MG	1A	3887	1/1	0.70	0.19	52,52,52,52	0
54	MG	1A	3853	1/1	0.71	0.10	53,53,53,53	0
54	MG	1A	3603	1/1	0.71	0.09	52,52,52,52	0
54	MG	2A	3527	1/1	0.71	0.10	63,63,63,63	0
54	MG	2a	3056	1/1	0.71	0.18	68,68,68,68	0
54	MG	2A	3147	1/1	0.71	0.25	84,84,84,84	0
54	MG	2A	3148	1/1	0.71	0.13	71,71,71,71	0
54	MG	1a	1783	1/1	0.71	0.10	76,76,76,76	0
54	MG	1A	3851	1/1	0.71	0.10	42,42,42,42	0
54	MG	1a	1832	1/1	0.71	0.10	68,68,68,68	0
54	MG	2A	3473	1/1	0.71	0.11	60,60,60,60	0
54	MG	1a	1666	1/1	0.72	0.11	63,63,63,63	0
54	MG	1a	1781	1/1	0.72	0.15	77,77,77,77	0
54	MG	1A	3616	1/1	0.72	0.17	74,74,74,74	0
54	MG	1A	3624	1/1	0.72	0.09	78,78,78,78	0
54	MG	1A	3586	1/1	0.72	0.11	55,55,55,55	0
54	MG	1a	1858	1/1	0.72	0.09	64,64,64,64	0
54	MG	2A	3541	1/1	0.72	0.09	59,59,59,59	0
54	MG	2A	3372	1/1	0.72	0.12	73,73,73,73	0
54	MG	1a	1859	1/1	0.72	0.06	70,70,70,70	0
54	MG	2a	3058	1/1	0.72	0.20	83,83,83,83	0
54	MG	1A	3102	1/1	0.72	0.25	72,72,72,72	0
54	MG	2A	3446	1/1	0.72	0.16	72,72,72,72	0
54	MG	1A	3553	1/1	0.72	0.17	66,66,66,66	0
54	MG	1A	3305	1/1	0.72	0.32	68,68,68,68	0
54	MG	1a	1662	1/1	0.72	0.15	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3470	1/1	0.72	0.18	71,71,71,71	0
54	MG	2a	3176	1/1	0.72	0.13	71,71,71,71	0
54	MG	2A	3210	1/1	0.73	0.15	65,65,65,65	0
54	MG	2A	3256	1/1	0.73	0.17	76,76,76,76	0
54	MG	1A	3964	1/1	0.73	0.34	78,78,78,78	0
54	MG	2A	3635	1/1	0.73	0.09	76,76,76,76	0
54	MG	1A	3795	1/1	0.73	0.15	68,68,68,68	0
54	MG	1B	218	1/1	0.73	0.18	62,62,62,62	0
54	MG	1T	202	1/1	0.73	0.14	75,75,75,75	0
54	MG	1A	3940	1/1	0.73	0.15	63,63,63,63	0
54	MG	1A	3826	1/1	0.73	0.13	68,68,68,68	0
54	MG	2A	3496	1/1	0.73	0.23	62,62,62,62	0
54	MG	2A	3380	1/1	0.73	0.34	69,69,69,69	0
54	MG	2A	3516	1/1	0.73	0.07	77,77,77,77	0
54	MG	1A	3011	1/1	0.73	0.13	62,62,62,62	0
54	MG	2A	3421	1/1	0.73	0.11	81,81,81,81	0
54	MG	2A	3175	1/1	0.74	0.09	63,63,63,63	0
54	MG	2a	3021	1/1	0.74	0.25	79,79,79,79	0
54	MG	2a	3051	1/1	0.74	0.13	77,77,77,77	0
54	MG	2A	3345	1/1	0.74	0.15	45,45,45,45	0
54	MG	1B	230	1/1	0.74	0.11	70,70,70,70	0
54	MG	2A	3234	1/1	0.74	0.17	60,60,60,60	0
54	MG	1a	1811	1/1	0.74	0.08	79,79,79,79	0
54	MG	2A	3381	1/1	0.74	0.15	49,49,49,49	0
54	MG	2A	3385	1/1	0.74	0.16	59,59,59,59	0
54	MG	1F	311	1/1	0.74	0.25	65,65,65,65	0
54	MG	2a	3147	1/1	0.74	0.09	77,77,77,77	0
54	MG	1A	3997	1/1	0.74	0.16	42,42,42,42	0
54	MG	1A	3685	1/1	0.74	0.26	63,63,63,63	0
54	MG	2A	3159	1/1	0.75	0.09	76,76,76,76	0
54	MG	1A	3438	1/1	0.75	0.15	44,44,44,44	0
54	MG	2B	213	1/1	0.75	0.24	73,73,73,73	0
54	MG	1A	3631	1/1	0.75	0.22	60,60,60,60	0
54	MG	2A	3219	1/1	0.75	0.18	67,67,67,67	0
54	MG	1A	3198	1/1	0.75	0.23	69,69,69,69	0
54	MG	1A	3982	1/1	0.75	0.35	59,59,59,59	0
54	MG	1A	3931	1/1	0.75	0.17	56,56,56,56	0
54	MG	2a	3054	1/1	0.75	0.12	68,68,68,68	0
54	MG	1B	207	1/1	0.75	0.36	73,73,73,73	0
54	MG	1a	1677	1/1	0.75	0.18	67,67,67,67	0
54	MG	1a	1865	1/1	0.75	0.09	70,70,70,70	0
54	MG	1A	3320	1/1	0.75	0.16	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3682	1/1	0.75	0.23	57,57,57,57	0
54	MG	1A	3584	1/1	0.75	0.21	47,47,47,47	0
54	MG	2A	3688	1/1	0.75	0.11	68,68,68,68	0
54	MG	1B	231	1/1	0.75	0.31	79,79,79,79	0
54	MG	1a	1815	1/1	0.75	0.10	76,76,76,76	0
54	MG	1A	3190	1/1	0.75	0.34	51,51,51,51	0
54	MG	2A	3217	1/1	0.76	0.22	74,74,74,74	0
54	MG	1A	3774	1/1	0.76	0.09	56,56,56,56	0
54	MG	1B	228	1/1	0.76	0.11	69,69,69,69	0
54	MG	1A	3299	1/1	0.76	0.26	64,64,64,64	0
54	MG	2A	3266	1/1	0.76	0.34	77,77,77,77	0
54	MG	2Q	202	1/1	0.76	0.13	74,74,74,74	0
54	MG	2a	3003	1/1	0.76	0.18	69,69,69,69	0
54	MG	2A	3608	1/1	0.76	0.17	78,78,78,78	0
54	MG	1A	3855	1/1	0.76	0.26	62,62,62,62	0
54	MG	2A	3638	1/1	0.76	0.11	66,66,66,66	0
54	MG	1A	3302	1/1	0.76	0.15	77,77,77,77	0
54	MG	2A	3656	1/1	0.76	0.16	83,83,83,83	0
54	MG	1A	3002	1/1	0.76	0.17	55,55,55,55	0
54	MG	1A	3979	1/1	0.76	0.61	77,77,77,77	0
54	MG	1A	3896	1/1	0.76	0.09	59,59,59,59	0
54	MG	2A	3477	1/1	0.76	0.14	81,81,81,81	0
54	MG	1A	3823	1/1	0.76	0.07	60,60,60,60	0
54	MG	1A	3692	1/1	0.76	0.14	51,51,51,51	0
54	MG	2A	3509	1/1	0.76	0.11	64,64,64,64	0
54	MG	2A	3193	1/1	0.76	0.37	59,59,59,59	0
54	MG	2a	3153	1/1	0.76	0.14	78,78,78,78	0
54	MG	1A	3317	1/1	0.76	0.11	55,55,55,55	0
54	MG	2A	3521	1/1	0.76	0.11	59,59,59,59	0
54	MG	1t	201	1/1	0.77	0.12	63,63,63,63	0
54	MG	2A	3659	1/1	0.77	0.14	55,55,55,55	0
54	MG	2A	3402	1/1	0.77	0.11	46,46,46,46	0
54	MG	2a	3020	1/1	0.77	0.20	70,70,70,70	0
54	MG	1a	1825	1/1	0.77	0.51	69,69,69,69	0
54	MG	2a	3047	1/1	0.77	0.14	76,76,76,76	0
54	MG	2A	3275	1/1	0.77	0.10	65,65,65,65	0
54	MG	1A	3387	1/1	0.77	0.19	57,57,57,57	0
54	MG	1A	3921	1/1	0.77	0.10	67,67,67,67	0
54	MG	1A	3873	1/1	0.77	0.20	40,40,40,40	0
54	MG	2A	3581	1/1	0.77	0.29	77,77,77,77	0
54	MG	1A	3585	1/1	0.77	0.22	48,48,48,48	0
54	MG	2a	3103	1/1	0.77	0.09	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1682	1/1	0.77	0.11	52,52,52,52	0
54	MG	1A	3610	1/1	0.77	0.21	31,31,31,31	0
54	MG	2A	3707	1/1	0.77	0.22	62,62,62,62	0
54	MG	1A	3558	1/1	0.77	0.20	53,53,53,53	0
54	MG	2a	3151	1/1	0.77	0.07	73,73,73,73	0
54	MG	1a	1631	1/1	0.77	0.16	69,69,69,69	0
54	MG	1A	3232	1/1	0.77	0.16	76,76,76,76	0
54	MG	1a	1663	1/1	0.77	0.45	72,72,72,72	0
54	MG	1A	3926	1/1	0.78	0.11	65,65,65,65	0
54	MG	1A	3991	1/1	0.78	0.07	60,60,60,60	0
54	MG	1V	203	1/1	0.78	0.28	62,62,62,62	0
54	MG	1a	1675	1/1	0.78	0.11	84,84,84,84	0
54	MG	2A	3079	1/1	0.78	0.12	77,77,77,77	0
54	MG	11	104	1/1	0.78	0.18	67,67,67,67	0
54	MG	1A	3366	1/1	0.78	0.13	69,69,69,69	0
54	MG	1A	3754	1/1	0.78	0.23	47,47,47,47	0
54	MG	2A	3168	1/1	0.78	0.15	54,54,54,54	0
54	MG	1a	1784	1/1	0.78	0.12	65,65,65,65	0
54	MG	2A	3184	1/1	0.78	0.20	81,81,81,81	0
54	MG	1a	1707	1/1	0.78	0.20	75,75,75,75	0
54	MG	2a	3080	1/1	0.78	0.29	85,85,85,85	0
54	MG	2A	3202	1/1	0.78	0.12	69,69,69,69	0
54	MG	2A	3693	1/1	0.78	0.12	64,64,64,64	0
54	MG	1a	1722	1/1	0.78	0.08	77,77,77,77	0
54	MG	1a	1645	1/1	0.78	0.18	68,68,68,68	0
54	MG	1D	316	1/1	0.78	0.16	54,54,54,54	0
54	MG	1d	304	1/1	0.78	0.10	65,65,65,65	0
54	MG	1l	202	1/1	0.78	0.14	78,78,78,78	0
54	MG	2A	3628	1/1	0.78	0.12	64,64,64,64	0
54	MG	2A	3453	1/1	0.78	0.22	70,70,70,70	0
54	MG	2F	302	1/1	0.78	0.16	51,51,51,51	0
54	MG	1A	3758	1/1	0.79	0.15	44,44,44,44	0
54	MG	2A	3426	1/1	0.79	0.17	49,49,49,49	0
54	MG	1A	3600	1/1	0.79	0.20	65,65,65,65	0
54	MG	1A	3886	1/1	0.79	0.20	31,31,31,31	0
54	MG	1a	1717	1/1	0.79	0.11	62,62,62,62	0
54	MG	1A	3994	1/1	0.79	0.33	62,62,62,62	0
54	MG	2a	3101	1/1	0.79	0.11	74,74,74,74	0
54	MG	1A	3925	1/1	0.79	0.17	72,72,72,72	0
54	MG	1a	1849	1/1	0.79	0.15	78,78,78,78	0
54	MG	1a	1671	1/1	0.79	0.13	69,69,69,69	0
54	MG	2a	3131	1/1	0.79	0.07	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3143	1/1	0.79	0.25	52,52,52,52	0
54	MG	2A	3593	1/1	0.79	0.09	59,59,59,59	0
54	MG	1A	3790	1/1	0.79	0.25	83,83,83,83	0
54	MG	1A	3975	1/1	0.79	0.09	66,66,66,66	0
54	MG	1A	3735	1/1	0.79	0.19	48,48,48,48	0
54	MG	2A	3637	1/1	0.79	0.08	78,78,78,78	0
57	MPD	1T	207	8/8	0.79	0.18	67,74,79,79	0
57	MPD	1a	1868	8/8	0.79	0.15	53,67,74,76	0
54	MG	2A	3713	1/1	0.80	0.09	67,67,67,67	0
54	MG	2A	3213	1/1	0.80	0.14	64,64,64,64	0
54	MG	2A	3550	1/1	0.80	0.12	65,65,65,65	0
54	MG	2A	3567	1/1	0.80	0.15	53,53,53,53	0
54	MG	1A	3497	1/1	0.80	0.19	57,57,57,57	0
54	MG	2I	201	1/1	0.80	0.11	75,75,75,75	0
54	MG	2P	201	1/1	0.80	0.09	69,69,69,69	0
54	MG	2A	3408	1/1	0.80	0.08	60,60,60,60	0
54	MG	1A	3852	1/1	0.80	0.20	61,61,61,61	0
54	MG	2A	3005	1/1	0.80	0.18	55,55,55,55	0
54	MG	2A	3609	1/1	0.80	0.24	70,70,70,70	0
54	MG	2a	3009	1/1	0.80	0.22	62,62,62,62	0
54	MG	2A	3622	1/1	0.80	0.13	61,61,61,61	0
54	MG	1A	3573	1/1	0.80	0.20	64,64,64,64	0
54	MG	2a	3024	1/1	0.80	0.14	73,73,73,73	0
54	MG	2A	3025	1/1	0.80	0.16	53,53,53,53	0
54	MG	2A	3272	1/1	0.80	0.13	59,59,59,59	0
54	MG	1A	3249	1/1	0.80	0.24	65,65,65,65	0
54	MG	2A	3281	1/1	0.80	0.15	39,39,39,39	0
54	MG	1A	3640	1/1	0.80	0.10	43,43,43,43	0
54	MG	2A	3469	1/1	0.80	0.14	44,44,44,44	0
54	MG	2a	3077	1/1	0.80	0.18	74,74,74,74	0
54	MG	1A	3676	1/1	0.80	0.10	66,66,66,66	0
54	MG	2A	3303	1/1	0.80	0.10	62,62,62,62	0
54	MG	2A	3325	1/1	0.80	0.12	53,53,53,53	0
54	MG	2A	3662	1/1	0.80	0.13	63,63,63,63	0
54	MG	2A	3480	1/1	0.80	0.13	68,68,68,68	0
54	MG	2a	3113	1/1	0.80	0.13	65,65,65,65	0
54	MG	1a	1679	1/1	0.80	0.11	64,64,64,64	0
54	MG	1A	3880	1/1	0.80	0.16	60,60,60,60	0
54	MG	2A	3503	1/1	0.80	0.24	76,76,76,76	0
54	MG	2a	3140	1/1	0.80	0.09	72,72,72,72	0
54	MG	1a	1686	1/1	0.80	0.11	57,57,57,57	0
54	MG	2A	3353	1/1	0.80	0.17	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3182	1/1	0.80	0.37	62,62,62,62	0
54	MG	1A	3427	1/1	0.80	0.21	67,67,67,67	0
54	MG	1B	213	1/1	0.80	0.19	72,72,72,72	0
54	MG	2h	201	1/1	0.80	0.26	84,84,84,84	0
54	MG	1A	3191	1/1	0.80	0.19	66,66,66,66	0
54	MG	1A	3891	1/1	0.80	0.10	56,56,56,56	0
54	MG	2A	3377	1/1	0.81	0.15	39,39,39,39	0
54	MG	2D	311	1/1	0.81	0.14	69,69,69,69	0
54	MG	1A	3728	1/1	0.81	0.26	58,58,58,58	0
54	MG	2G	201	1/1	0.81	0.15	68,68,68,68	0
54	MG	1A	3412	1/1	0.81	0.29	37,37,37,37	0
54	MG	1a	1848	1/1	0.81	0.12	72,72,72,72	0
54	MG	1a	1649	1/1	0.81	0.13	72,72,72,72	0
54	MG	2T	203	1/1	0.81	0.10	69,69,69,69	0
54	MG	2A	3188	1/1	0.81	0.16	76,76,76,76	0
54	MG	1A	3363	1/1	0.81	0.18	59,59,59,59	0
54	MG	1a	1758	1/1	0.81	0.13	66,66,66,66	0
54	MG	1A	3527	1/1	0.81	0.20	59,59,59,59	0
54	MG	1a	1762	1/1	0.81	0.22	66,66,66,66	0
54	MG	2A	3633	1/1	0.81	0.35	67,67,67,67	0
54	MG	1a	1863	1/1	0.81	0.11	66,66,66,66	0
54	MG	1A	3751	1/1	0.81	0.16	46,46,46,46	0
54	MG	1A	3645	1/1	0.81	0.19	32,32,32,32	0
54	MG	2a	3052	1/1	0.81	0.11	83,83,83,83	0
54	MG	2A	3243	1/1	0.81	0.21	58,58,58,58	0
54	MG	2a	3055	1/1	0.81	0.29	70,70,70,70	0
54	MG	1A	3572	1/1	0.81	0.20	38,38,38,38	0
54	MG	2A	3466	1/1	0.81	0.07	64,64,64,64	0
54	MG	1m	201	1/1	0.81	0.12	75,75,75,75	0
54	MG	1A	3250	1/1	0.81	0.33	75,75,75,75	0
54	MG	1A	3061	1/1	0.81	0.15	57,57,57,57	0
54	MG	1A	3770	1/1	0.81	0.19	70,70,70,70	0
54	MG	2a	3086	1/1	0.81	0.39	68,68,68,68	0
54	MG	10	102	1/1	0.81	0.41	53,53,53,53	0
54	MG	2A	3668	1/1	0.81	0.15	75,75,75,75	0
54	MG	10	106	1/1	0.81	0.20	48,48,48,48	0
54	MG	2A	3493	1/1	0.81	0.19	40,40,40,40	0
54	MG	1A	3269	1/1	0.81	0.16	78,78,78,78	0
54	MG	2A	3684	1/1	0.81	0.11	58,58,58,58	0
54	MG	2A	3046	1/1	0.81	0.28	64,64,64,64	0
54	MG	2A	3504	1/1	0.81	0.15	64,64,64,64	0
54	MG	17	105	1/1	0.81	0.22	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3139	1/1	0.81	0.48	61,61,61,61	0
54	MG	1a	1604	1/1	0.81	0.11	72,72,72,72	0
54	MG	2A	3518	1/1	0.81	0.09	65,65,65,65	0
54	MG	2A	3348	1/1	0.81	0.16	77,77,77,77	0
54	MG	1A	3411	1/1	0.81	0.11	74,74,74,74	0
56	ARG	1A	3998	12/12	0.81	0.18	56,69,76,77	0
54	MG	1a	1630	1/1	0.81	0.13	48,48,48,48	0
54	MG	2A	3158	1/1	0.81	0.26	62,62,62,62	0
54	MG	1a	1638	1/1	0.82	0.11	78,78,78,78	0
54	MG	2A	3623	1/1	0.82	0.12	42,42,42,42	0
54	MG	1a	1641	1/1	0.82	0.56	63,63,63,63	0
54	MG	1A	3476	1/1	0.82	0.16	61,61,61,61	0
54	MG	1A	3809	1/1	0.82	0.19	47,47,47,47	0
54	MG	1A	3487	1/1	0.82	0.10	62,62,62,62	0
54	MG	1a	1768	1/1	0.82	0.38	61,61,61,61	0
54	MG	1A	3626	1/1	0.82	0.26	67,67,67,67	0
54	MG	1A	3629	1/1	0.82	0.12	42,42,42,42	0
54	MG	1E	301	1/1	0.82	0.51	52,52,52,52	0
54	MG	1A	3976	1/1	0.82	0.25	49,49,49,49	0
54	MG	2A	3280	1/1	0.82	0.28	80,80,80,80	0
54	MG	1A	3850	1/1	0.82	0.20	33,33,33,33	0
54	MG	1A	3693	1/1	0.82	0.29	65,65,65,65	0
54	MG	1A	3550	1/1	0.82	0.09	61,61,61,61	0
54	MG	2A	3034	1/1	0.82	0.25	66,66,66,66	0
54	MG	2a	3068	1/1	0.82	0.09	65,65,65,65	0
54	MG	1A	3984	1/1	0.82	0.44	68,68,68,68	0
54	MG	2A	3058	1/1	0.82	0.14	65,65,65,65	0
54	MG	1a	1805	1/1	0.82	0.11	67,67,67,67	0
54	MG	2A	3115	1/1	0.82	0.15	71,71,71,71	0
54	MG	1A	3339	1/1	0.82	0.09	48,48,48,48	0
54	MG	2A	3349	1/1	0.82	0.16	54,54,54,54	0
54	MG	1a	1684	1/1	0.82	0.16	72,72,72,72	0
54	MG	12	101	1/1	0.82	0.17	72,72,72,72	0
54	MG	1a	1826	1/1	0.82	0.18	66,66,66,66	0
54	MG	2a	3118	1/1	0.82	0.33	72,72,72,72	0
54	MG	1a	1699	1/1	0.82	0.08	75,75,75,75	0
54	MG	15	108	1/1	0.82	0.23	56,56,56,56	0
54	MG	2A	3547	1/1	0.82	0.12	52,52,52,52	0
54	MG	1a	1708	1/1	0.82	0.11	74,74,74,74	0
54	MG	2A	3720	1/1	0.82	0.10	70,70,70,70	0
54	MG	1A	3473	1/1	0.82	0.21	35,35,35,35	0
54	MG	2A	3574	1/1	0.82	0.23	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3179	1/1	0.82	0.25	68,68,68,68	0
54	MG	2D	312	1/1	0.82	0.13	69,69,69,69	0
54	MG	1A	3662	1/1	0.82	0.07	78,78,78,78	0
54	MG	1B	206	1/1	0.82	0.17	51,51,51,51	0
54	MG	1A	3870	1/1	0.82	0.27	45,45,45,45	0
54	MG	1A	3670	1/1	0.82	0.15	72,72,72,72	0
54	MG	1E	309	1/1	0.83	0.16	54,54,54,54	0
54	MG	2A	3542	1/1	0.83	0.20	59,59,59,59	0
54	MG	2A	3369	1/1	0.83	0.12	72,72,72,72	0
54	MG	1A	3276	1/1	0.83	0.13	53,53,53,53	0
54	MG	2A	3555	1/1	0.83	0.23	71,71,71,71	0
54	MG	1P	204	1/1	0.83	0.15	80,80,80,80	0
54	MG	1a	1776	1/1	0.83	0.14	71,71,71,71	0
54	MG	1T	201	1/1	0.83	0.15	57,57,57,57	0
54	MG	2A	3190	1/1	0.83	0.17	64,64,64,64	0
54	MG	2A	3192	1/1	0.83	0.25	72,72,72,72	0
54	MG	20	101	1/1	0.83	0.11	59,59,59,59	0
54	MG	2A	3394	1/1	0.83	0.15	67,67,67,67	0
54	MG	1A	3333	1/1	0.83	0.23	37,37,37,37	0
54	MG	1f	201	1/1	0.83	0.14	53,53,53,53	0
54	MG	1A	3403	1/1	0.83	0.15	72,72,72,72	0
54	MG	2A	3625	1/1	0.83	0.21	69,69,69,69	0
54	MG	1A	3910	1/1	0.83	0.11	59,59,59,59	0
54	MG	1A	3267	1/1	0.83	0.10	84,84,84,84	0
54	MG	2a	3034	1/1	0.83	0.20	78,78,78,78	0
54	MG	2A	3634	1/1	0.83	0.51	51,51,51,51	0
54	MG	1A	3358	1/1	0.83	0.21	37,37,37,37	0
54	MG	2A	3228	1/1	0.83	0.19	64,64,64,64	0
54	MG	1A	3315	1/1	0.83	0.23	42,42,42,42	0
54	MG	2A	3640	1/1	0.83	0.18	61,61,61,61	0
54	MG	1A	3589	1/1	0.83	0.21	41,41,41,41	0
54	MG	2A	3462	1/1	0.83	0.12	73,73,73,73	0
54	MG	2a	3059	1/1	0.83	0.20	65,65,65,65	0
54	MG	2A	3249	1/1	0.83	0.18	65,65,65,65	0
54	MG	2A	3251	1/1	0.83	0.28	74,74,74,74	0
54	MG	1a	1791	1/1	0.83	0.12	56,56,56,56	0
54	MG	1A	3865	1/1	0.83	0.18	46,46,46,46	0
54	MG	1A	3598	1/1	0.83	0.15	42,42,42,42	0
54	MG	1A	3184	1/1	0.83	0.18	59,59,59,59	0
54	MG	2A	3279	1/1	0.83	0.13	64,64,64,64	0
54	MG	2A	3049	1/1	0.83	0.16	76,76,76,76	0
54	MG	2A	3673	1/1	0.83	0.15	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3681	1/1	0.83	0.21	74,74,74,74	0
54	MG	1A	3521	1/1	0.83	0.15	55,55,55,55	0
54	MG	2A	3063	1/1	0.83	0.25	66,66,66,66	0
54	MG	2a	3125	1/1	0.83	0.12	68,68,68,68	0
54	MG	2a	3128	1/1	0.83	0.06	66,66,66,66	0
54	MG	2A	3497	1/1	0.83	0.19	77,77,77,77	0
54	MG	1B	224	1/1	0.83	0.16	62,62,62,62	0
54	MG	1A	3745	1/1	0.83	0.19	56,56,56,56	0
54	MG	2A	3312	1/1	0.83	0.17	68,68,68,68	0
54	MG	1a	1738	1/1	0.83	0.15	61,61,61,61	0
54	MG	1A	3660	1/1	0.83	0.27	73,73,73,73	0
54	MG	1A	3965	1/1	0.83	0.18	60,60,60,60	0
54	MG	1A	3966	1/1	0.83	0.13	67,67,67,67	0
54	MG	1a	1656	1/1	0.83	0.10	72,72,72,72	0
54	MG	1A	3525	1/1	0.83	0.11	71,71,71,71	0
54	MG	2A	3164	1/1	0.83	0.10	70,70,70,70	0
54	MG	2B	211	1/1	0.83	0.19	63,63,63,63	0
54	MG	1A	3233	1/1	0.84	0.23	72,72,72,72	0
54	MG	2A	3097	1/1	0.84	0.11	67,67,67,67	0
54	MG	2A	3523	1/1	0.84	0.10	65,65,65,65	0
54	MG	2B	207	1/1	0.84	0.14	79,79,79,79	0
54	MG	1a	1795	1/1	0.84	0.07	73,73,73,73	0
54	MG	2B	212	1/1	0.84	0.20	79,79,79,79	0
54	MG	2A	3123	1/1	0.84	0.11	73,73,73,73	0
54	MG	1A	3675	1/1	0.84	0.13	79,79,79,79	0
54	MG	2B	217	1/1	0.84	0.22	86,86,86,86	0
54	MG	2D	310	1/1	0.84	0.12	74,74,74,74	0
54	MG	1A	3385	1/1	0.84	0.19	36,36,36,36	0
54	MG	1X	101	1/1	0.84	0.11	68,68,68,68	0
54	MG	1a	1823	1/1	0.84	0.10	76,76,76,76	0
54	MG	1A	3507	1/1	0.84	0.08	58,58,58,58	0
54	MG	2A	3552	1/1	0.84	0.11	75,75,75,75	0
54	MG	1a	1690	1/1	0.84	0.16	70,70,70,70	0
54	MG	2A	3564	1/1	0.84	0.07	61,61,61,61	0
54	MG	1A	3980	1/1	0.84	0.51	80,80,80,80	0
54	MG	1A	3432	1/1	0.84	0.16	57,57,57,57	0
54	MG	2A	3575	1/1	0.84	0.26	38,38,38,38	0
54	MG	1A	3436	1/1	0.84	0.09	81,81,81,81	0
54	MG	1A	3043	1/1	0.84	0.32	62,62,62,62	0
54	MG	2A	3589	1/1	0.84	0.13	48,48,48,48	0
54	MG	1A	3154	1/1	0.84	0.22	61,61,61,61	0
54	MG	1a	1723	1/1	0.84	0.07	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1603	1/1	0.84	0.11	79,79,79,79	0
54	MG	2a	3033	1/1	0.84	0.19	68,68,68,68	0
54	MG	1A	3582	1/1	0.84	0.10	70,70,70,70	0
54	MG	2A	3404	1/1	0.84	0.13	61,61,61,61	0
54	MG	1A	3409	1/1	0.84	0.11	74,74,74,74	0
54	MG	2A	3412	1/1	0.84	0.21	63,63,63,63	0
54	MG	1a	1611	1/1	0.84	0.05	80,80,80,80	0
54	MG	1a	1617	1/1	0.84	0.11	62,62,62,62	0
54	MG	2A	3437	1/1	0.84	0.20	71,71,71,71	0
54	MG	2a	3057	1/1	0.84	0.11	76,76,76,76	0
54	MG	2A	3438	1/1	0.84	0.11	72,72,72,72	0
54	MG	1A	3913	1/1	0.84	0.20	81,81,81,81	0
54	MG	1A	3118	1/1	0.84	0.24	53,53,53,53	0
54	MG	1A	3831	1/1	0.84	0.09	57,57,57,57	0
54	MG	2A	3643	1/1	0.84	0.18	62,62,62,62	0
54	MG	2A	3650	1/1	0.84	0.11	67,67,67,67	0
54	MG	1A	3744	1/1	0.84	0.13	70,70,70,70	0
54	MG	1a	1763	1/1	0.84	0.15	67,67,67,67	0
54	MG	2A	3461	1/1	0.84	0.10	68,68,68,68	0
54	MG	2A	3242	1/1	0.84	0.19	68,68,68,68	0
54	MG	1a	1766	1/1	0.84	0.18	68,68,68,68	0
54	MG	2A	3244	1/1	0.84	0.32	60,60,60,60	0
54	MG	2A	3245	1/1	0.84	0.37	73,73,73,73	0
54	MG	1A	3306	1/1	0.84	0.29	81,81,81,81	0
54	MG	1A	3311	1/1	0.84	0.18	71,71,71,71	0
54	MG	1A	3749	1/1	0.84	0.14	35,35,35,35	0
54	MG	2A	3258	1/1	0.84	0.36	70,70,70,70	0
54	MG	1A	3657	1/1	0.84	0.10	61,61,61,61	0
54	MG	1A	3479	1/1	0.84	0.10	46,46,46,46	0
54	MG	2A	3032	1/1	0.84	0.16	64,64,64,64	0
54	MG	1A	3958	1/1	0.84	0.18	85,85,85,85	0
54	MG	2a	3152	1/1	0.84	0.15	74,74,74,74	0
54	MG	2A	3498	1/1	0.84	0.16	64,64,64,64	0
54	MG	1A	3960	1/1	0.84	0.13	65,65,65,65	0
54	MG	2a	3157	1/1	0.84	0.10	87,87,87,87	0
54	MG	2a	3160	1/1	0.84	0.18	82,82,82,82	0
54	MG	1A	3085	1/1	0.84	0.10	52,52,52,52	0
54	MG	2A	3698	1/1	0.84	0.10	58,58,58,58	0
54	MG	2A	3050	1/1	0.84	0.15	51,51,51,51	0
54	MG	1O	201	1/1	0.84	0.10	58,58,58,58	0
54	MG	1A	3665	1/1	0.84	0.17	48,48,48,48	0
54	MG	1A	3556	1/1	0.85	0.33	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3004	1/1	0.85	0.12	62,62,62,62	0
54	MG	2A	3500	1/1	0.85	0.09	58,58,58,58	0
54	MG	1A	3210	1/1	0.85	0.24	40,40,40,40	0
54	MG	1a	1680	1/1	0.85	0.11	66,66,66,66	0
54	MG	1A	3658	1/1	0.85	0.24	56,56,56,56	0
54	MG	1A	3767	1/1	0.85	0.11	59,59,59,59	0
54	MG	1A	3137	1/1	0.85	0.14	63,63,63,63	0
54	MG	2A	3240	1/1	0.85	0.11	63,63,63,63	0
54	MG	2A	3084	1/1	0.85	0.14	56,56,56,56	0
54	MG	1A	3108	1/1	0.85	0.18	47,47,47,47	0
54	MG	1P	202	1/1	0.85	0.26	48,48,48,48	0
54	MG	2A	3529	1/1	0.85	0.20	43,43,43,43	0
54	MG	1A	3234	1/1	0.85	0.19	53,53,53,53	0
54	MG	1B	203	1/1	0.85	0.18	72,72,72,72	0
54	MG	2A	3410	1/1	0.85	0.09	67,67,67,67	0
54	MG	2A	3411	1/1	0.85	0.33	51,51,51,51	0
54	MG	1A	3281	1/1	0.85	0.27	44,44,44,44	0
54	MG	2A	3146	1/1	0.85	0.13	73,73,73,73	0
54	MG	2A	3423	1/1	0.85	0.18	72,72,72,72	0
54	MG	1A	3091	1/1	0.85	0.27	54,54,54,54	0
54	MG	2a	3073	1/1	0.85	0.12	63,63,63,63	0
54	MG	2A	3559	1/1	0.85	0.07	67,67,67,67	0
54	MG	2A	3561	1/1	0.85	0.16	52,52,52,52	0
54	MG	1W	202	1/1	0.85	0.28	56,56,56,56	0
54	MG	2A	3149	1/1	0.85	0.15	53,53,53,53	0
54	MG	2a	3096	1/1	0.85	0.15	63,63,63,63	0
54	MG	1a	1727	1/1	0.85	0.16	78,78,78,78	0
54	MG	2A	3711	1/1	0.85	0.15	56,56,56,56	0
54	MG	1A	3047	1/1	0.85	0.35	51,51,51,51	0
54	MG	1A	3969	1/1	0.85	0.06	57,57,57,57	0
54	MG	1B	221	1/1	0.85	0.17	54,54,54,54	0
54	MG	2B	205	1/1	0.85	0.17	65,65,65,65	0
54	MG	2A	3169	1/1	0.85	0.29	67,67,67,67	0
54	MG	2A	3173	1/1	0.85	0.19	62,62,62,62	0
54	MG	2A	3600	1/1	0.85	0.11	55,55,55,55	0
54	MG	2A	3604	1/1	0.85	0.09	70,70,70,70	0
54	MG	1r	101	1/1	0.85	0.31	72,72,72,72	0
54	MG	1a	1808	1/1	0.85	0.14	74,74,74,74	0
54	MG	1A	3634	1/1	0.85	0.16	59,59,59,59	0
54	MG	2A	3328	1/1	0.85	0.16	43,43,43,43	0
54	MG	1a	1749	1/1	0.85	0.11	60,60,60,60	0
54	MG	2E	307	1/1	0.85	0.13	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1B	226	1/1	0.85	0.08	62,62,62,62	0
54	MG	2A	3337	1/1	0.85	0.18	40,40,40,40	0
54	MG	2a	3163	1/1	0.85	0.14	70,70,70,70	0
54	MG	1a	1824	1/1	0.85	0.20	68,68,68,68	0
54	MG	2A	3346	1/1	0.85	0.13	77,77,77,77	0
54	MG	1A	3807	1/1	0.85	0.16	51,51,51,51	0
54	MG	1A	3580	1/1	0.85	0.16	46,46,46,46	0
54	MG	2A	3205	1/1	0.85	0.12	71,71,71,71	0
57	MPD	2B	219	8/8	0.85	0.18	59,68,74,77	0
54	MG	1a	1640	1/1	0.86	0.12	71,71,71,71	0
54	MG	1y	201	1/1	0.86	0.16	63,63,63,63	0
54	MG	20	102	1/1	0.86	0.12	68,68,68,68	0
54	MG	1A	3716	1/1	0.86	0.14	55,55,55,55	0
54	MG	2A	3189	1/1	0.86	0.11	66,66,66,66	0
54	MG	1A	3597	1/1	0.86	0.23	49,49,49,49	0
54	MG	1A	3027	1/1	0.86	0.12	67,67,67,67	0
54	MG	1A	3906	1/1	0.86	0.13	67,67,67,67	0
54	MG	2A	3501	1/1	0.86	0.08	58,58,58,58	0
54	MG	2A	3195	1/1	0.86	0.14	62,62,62,62	0
54	MG	2A	3031	1/1	0.86	0.19	69,69,69,69	0
54	MG	2A	3508	1/1	0.86	0.46	80,80,80,80	0
54	MG	1A	3599	1/1	0.86	0.10	63,63,63,63	0
54	MG	1A	3301	1/1	0.86	0.44	60,60,60,60	0
54	MG	2a	3048	1/1	0.86	0.16	73,73,73,73	0
54	MG	1A	3308	1/1	0.86	0.16	52,52,52,52	0
54	MG	2A	3048	1/1	0.86	0.19	70,70,70,70	0
54	MG	2A	3384	1/1	0.86	0.24	59,59,59,59	0
54	MG	1a	1830	1/1	0.86	0.20	85,85,85,85	0
54	MG	10	107	1/1	0.86	0.15	68,68,68,68	0
54	MG	2A	3230	1/1	0.86	0.13	59,59,59,59	0
54	MG	1A	3413	1/1	0.86	0.23	39,39,39,39	0
54	MG	1A	3683	1/1	0.86	0.21	42,42,42,42	0
54	MG	1A	3414	1/1	0.86	0.33	45,45,45,45	0
54	MG	1A	3929	1/1	0.86	0.30	85,85,85,85	0
54	MG	2A	3544	1/1	0.86	0.11	58,58,58,58	0
54	MG	2A	3088	1/1	0.86	0.12	65,65,65,65	0
54	MG	1A	3686	1/1	0.86	0.13	54,54,54,54	0
54	MG	1a	1850	1/1	0.86	0.14	55,55,55,55	0
54	MG	2A	3118	1/1	0.86	0.26	61,61,61,61	0
54	MG	2a	3090	1/1	0.86	0.12	75,75,75,75	0
54	MG	2A	3701	1/1	0.86	0.07	61,61,61,61	0
54	MG	1A	3936	1/1	0.86	0.13	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3431	1/1	0.86	0.12	64,64,64,64	0
54	MG	2a	3110	1/1	0.86	0.12	67,67,67,67	0
54	MG	2A	3705	1/1	0.86	0.11	62,62,62,62	0
54	MG	2A	3131	1/1	0.86	0.22	48,48,48,48	0
54	MG	2A	3264	1/1	0.86	0.08	72,72,72,72	0
54	MG	1a	1605	1/1	0.86	0.10	66,66,66,66	0
54	MG	1F	309	1/1	0.86	0.36	68,68,68,68	0
54	MG	2A	3577	1/1	0.86	0.07	79,79,79,79	0
54	MG	2A	3725	1/1	0.86	0.09	61,61,61,61	0
54	MG	2a	3132	1/1	0.86	0.11	70,70,70,70	0
54	MG	1A	3541	1/1	0.86	0.37	55,55,55,55	0
54	MG	2A	3583	1/1	0.86	0.09	62,62,62,62	0
54	MG	1a	1689	1/1	0.86	0.09	74,74,74,74	0
54	MG	2A	3588	1/1	0.86	0.21	53,53,53,53	0
54	MG	1F	314	1/1	0.86	0.20	47,47,47,47	0
54	MG	1b	301	1/1	0.86	0.12	83,83,83,83	0
54	MG	1a	1625	1/1	0.86	0.12	60,60,60,60	0
54	MG	1a	1705	1/1	0.86	0.22	62,62,62,62	0
54	MG	1i	201	1/1	0.86	0.18	75,75,75,75	0
54	MG	1A	3543	1/1	0.86	0.17	45,45,45,45	0
54	MG	2a	3167	1/1	0.86	0.18	72,72,72,72	0
54	MG	2A	3613	1/1	0.86	0.14	59,59,59,59	0
54	MG	1A	3175	1/1	0.86	0.19	75,75,75,75	0
54	MG	1a	1637	1/1	0.86	0.11	80,80,80,80	0
54	MG	2A	3476	1/1	0.86	0.18	59,59,59,59	0
54	MG	1A	3889	1/1	0.86	0.09	64,64,64,64	0
54	MG	2A	3632	1/1	0.86	0.10	69,69,69,69	0
54	MG	2A	3407	1/1	0.87	0.12	75,75,75,75	0
54	MG	2A	3200	1/1	0.87	0.32	65,65,65,65	0
54	MG	1A	3802	1/1	0.87	0.12	62,62,62,62	0
54	MG	1A	3627	1/1	0.87	0.29	44,44,44,44	0
54	MG	1a	1773	1/1	0.87	0.14	78,78,78,78	0
54	MG	2A	3414	1/1	0.87	0.07	86,86,86,86	0
54	MG	2A	3420	1/1	0.87	0.14	67,67,67,67	0
54	MG	1A	3460	1/1	0.87	0.09	54,54,54,54	0
54	MG	2A	3597	1/1	0.87	0.20	41,41,41,41	0
54	MG	1A	3461	1/1	0.87	0.15	65,65,65,65	0
54	MG	1A	3633	1/1	0.87	0.21	33,33,33,33	0
54	MG	2A	3605	1/1	0.87	0.16	70,70,70,70	0
54	MG	2A	3430	1/1	0.87	0.21	79,79,79,79	0
54	MG	1A	3821	1/1	0.87	0.37	59,59,59,59	0
54	MG	1A	3592	1/1	0.87	0.18	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3232	1/1	0.87	0.18	75,75,75,75	0
54	MG	1A	3463	1/1	0.87	0.25	67,67,67,67	0
54	MG	1A	3743	1/1	0.87	0.11	45,45,45,45	0
54	MG	1A	3842	1/1	0.87	0.15	55,55,55,55	0
54	MG	2a	3031	1/1	0.87	0.08	71,71,71,71	0
54	MG	1a	1789	1/1	0.87	0.09	73,73,73,73	0
54	MG	1A	3848	1/1	0.87	0.16	70,70,70,70	0
54	MG	2a	3043	1/1	0.87	0.08	66,66,66,66	0
54	MG	1A	3351	1/1	0.87	0.24	45,45,45,45	0
54	MG	1A	3956	1/1	0.87	0.13	50,50,50,50	0
54	MG	2A	3054	1/1	0.87	0.41	51,51,51,51	0
54	MG	1A	3647	1/1	0.87	0.09	53,53,53,53	0
54	MG	1A	3746	1/1	0.87	0.17	31,31,31,31	0
54	MG	1A	3522	1/1	0.87	0.12	57,57,57,57	0
54	MG	1a	1814	1/1	0.87	0.13	70,70,70,70	0
54	MG	1a	1681	1/1	0.87	0.10	55,55,55,55	0
54	MG	1A	3748	1/1	0.87	0.11	46,46,46,46	0
54	MG	1V	205	1/1	0.87	0.31	73,73,73,73	0
54	MG	2A	3484	1/1	0.87	0.08	60,60,60,60	0
54	MG	1A	3318	1/1	0.87	0.23	68,68,68,68	0
54	MG	2a	3070	1/1	0.87	0.19	70,70,70,70	0
54	MG	1A	3602	1/1	0.87	0.12	72,72,72,72	0
54	MG	2a	3074	1/1	0.87	0.10	70,70,70,70	0
54	MG	1Z	301	1/1	0.87	0.17	65,65,65,65	0
54	MG	2a	3078	1/1	0.87	0.13	69,69,69,69	0
54	MG	2A	3299	1/1	0.87	0.15	43,43,43,43	0
54	MG	1A	3014	1/1	0.87	0.18	66,66,66,66	0
54	MG	1A	3872	1/1	0.87	0.22	27,27,27,27	0
54	MG	2a	3088	1/1	0.87	0.12	71,71,71,71	0
54	MG	1A	3094	1/1	0.87	0.22	46,46,46,46	0
54	MG	2A	3678	1/1	0.87	0.12	50,50,50,50	0
54	MG	2A	3323	1/1	0.87	0.21	39,39,39,39	0
54	MG	1A	3490	1/1	0.87	0.08	57,57,57,57	0
54	MG	2a	3109	1/1	0.87	0.07	60,60,60,60	0
54	MG	1a	1847	1/1	0.87	0.19	70,70,70,70	0
54	MG	1A	3090	1/1	0.87	0.71	61,61,61,61	0
54	MG	2A	3150	1/1	0.87	0.19	45,45,45,45	0
54	MG	2a	3116	1/1	0.87	0.12	64,64,64,64	0
54	MG	2A	3157	1/1	0.87	0.10	60,60,60,60	0
54	MG	1A	3581	1/1	0.87	0.11	47,47,47,47	0
54	MG	1A	3621	1/1	0.87	0.30	40,40,40,40	0
54	MG	1A	3888	1/1	0.87	0.08	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3622	1/1	0.87	0.19	40,40,40,40	0
54	MG	2A	3351	1/1	0.87	0.15	43,43,43,43	0
54	MG	1A	3546	1/1	0.87	0.12	51,51,51,51	0
54	MG	1A	3777	1/1	0.87	0.18	54,54,54,54	0
54	MG	1a	1608	1/1	0.87	0.11	61,61,61,61	0
54	MG	1A	3898	1/1	0.87	0.09	44,44,44,44	0
54	MG	2A	3180	1/1	0.87	0.19	69,69,69,69	0
54	MG	2A	3183	1/1	0.87	0.12	66,66,66,66	0
54	MG	1A	3449	1/1	0.87	0.20	31,31,31,31	0
54	MG	1a	1623	1/1	0.87	0.14	66,66,66,66	0
54	MG	1A	3904	1/1	0.87	0.11	56,56,56,56	0
54	MG	2A	3557	1/1	0.87	0.17	53,53,53,53	0
54	MG	2B	209	1/1	0.87	0.29	72,72,72,72	0
54	MG	1h	201	1/1	0.87	0.20	72,72,72,72	0
54	MG	1B	216	1/1	0.87	0.22	54,54,54,54	0
54	MG	2A	3399	1/1	0.87	0.17	41,41,41,41	0
54	MG	1A	3379	1/1	0.87	0.21	39,39,39,39	0
54	MG	2A	3570	1/1	0.87	0.09	62,62,62,62	0
54	MG	1A	3797	1/1	0.87	0.39	37,37,37,37	0
54	MG	2A	3535	1/1	0.88	0.26	55,55,55,55	0
54	MG	1A	3986	1/1	0.88	0.23	76,76,76,76	0
54	MG	1a	1842	1/1	0.88	0.15	77,77,77,77	0
54	MG	2A	3543	1/1	0.88	0.08	56,56,56,56	0
54	MG	1A	3899	1/1	0.88	0.07	53,53,53,53	0
54	MG	1A	3818	1/1	0.88	0.12	38,38,38,38	0
54	MG	2D	308	1/1	0.88	0.20	64,64,64,64	0
54	MG	2D	309	1/1	0.88	0.13	34,34,34,34	0
54	MG	2A	3370	1/1	0.88	0.18	42,42,42,42	0
54	MG	1A	3472	1/1	0.88	0.23	39,39,39,39	0
54	MG	2A	3374	1/1	0.88	0.14	71,71,71,71	0
54	MG	2E	303	1/1	0.88	0.56	57,57,57,57	0
54	MG	1A	3155	1/1	0.88	0.26	59,59,59,59	0
54	MG	1A	3176	1/1	0.88	0.18	54,54,54,54	0
54	MG	1A	3829	1/1	0.88	0.13	58,58,58,58	0
54	MG	2A	3177	1/1	0.88	0.07	69,69,69,69	0
54	MG	1a	1855	1/1	0.88	0.07	65,65,65,65	0
54	MG	2Q	201	1/1	0.88	0.12	54,54,54,54	0
54	MG	1A	3757	1/1	0.88	0.26	52,52,52,52	0
54	MG	2A	3393	1/1	0.88	0.13	37,37,37,37	0
54	MG	2T	204	1/1	0.88	0.06	61,61,61,61	0
54	MG	1A	3835	1/1	0.88	0.09	41,41,41,41	0
54	MG	2A	3396	1/1	0.88	0.17	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3185	1/1	0.88	0.20	61,61,61,61	0
54	MG	1A	3264	1/1	0.88	0.14	49,49,49,49	0
54	MG	1A	3578	1/1	0.88	0.28	58,58,58,58	0
54	MG	2a	3007	1/1	0.88	0.24	75,75,75,75	0
54	MG	2A	3405	1/1	0.88	0.18	54,54,54,54	0
54	MG	1a	1627	1/1	0.88	0.21	71,71,71,71	0
54	MG	1A	3386	1/1	0.88	0.15	42,42,42,42	0
54	MG	2A	3596	1/1	0.88	0.18	40,40,40,40	0
54	MG	1A	3711	1/1	0.88	0.07	49,49,49,49	0
54	MG	1a	1632	1/1	0.88	0.15	44,44,44,44	0
54	MG	1A	3646	1/1	0.88	0.12	52,52,52,52	0
54	MG	1A	3938	1/1	0.88	0.16	30,30,30,30	0
54	MG	2a	3040	1/1	0.88	0.13	71,71,71,71	0
54	MG	2a	3041	1/1	0.88	0.12	68,68,68,68	0
54	MG	1a	1769	1/1	0.88	0.13	51,51,51,51	0
54	MG	1A	3773	1/1	0.88	0.29	59,59,59,59	0
54	MG	1A	3942	1/1	0.88	0.07	68,68,68,68	0
54	MG	2a	3049	1/1	0.88	0.18	71,71,71,71	0
54	MG	2A	3617	1/1	0.88	0.15	42,42,42,42	0
54	MG	2A	3621	1/1	0.88	0.16	55,55,55,55	0
54	MG	1a	1779	1/1	0.88	0.14	69,69,69,69	0
54	MG	2A	3429	1/1	0.88	0.16	46,46,46,46	0
54	MG	1E	305	1/1	0.88	0.22	30,30,30,30	0
54	MG	1A	3944	1/1	0.88	0.17	63,63,63,63	0
54	MG	1A	3202	1/1	0.88	0.09	63,63,63,63	0
54	MG	1A	3398	1/1	0.88	0.33	70,70,70,70	0
54	MG	2a	3061	1/1	0.88	0.20	71,71,71,71	0
54	MG	1A	3951	1/1	0.88	0.40	59,59,59,59	0
54	MG	1A	3867	1/1	0.88	0.20	69,69,69,69	0
54	MG	2A	3033	1/1	0.88	0.21	72,72,72,72	0
54	MG	1a	1668	1/1	0.88	0.09	68,68,68,68	0
54	MG	1A	3733	1/1	0.88	0.12	64,64,64,64	0
54	MG	1A	3793	1/1	0.88	0.20	49,49,49,49	0
54	MG	2A	3246	1/1	0.88	0.28	70,70,70,70	0
54	MG	1A	3611	1/1	0.88	0.11	61,61,61,61	0
54	MG	2A	3652	1/1	0.88	0.10	83,83,83,83	0
54	MG	1A	3875	1/1	0.88	0.18	36,36,36,36	0
54	MG	2a	3087	1/1	0.88	0.12	64,64,64,64	0
54	MG	1a	1796	1/1	0.88	0.19	68,68,68,68	0
54	MG	2A	3055	1/1	0.88	0.07	48,48,48,48	0
54	MG	2A	3472	1/1	0.88	0.08	63,63,63,63	0
54	MG	2A	3056	1/1	0.88	0.14	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3475	1/1	0.88	0.21	76,76,76,76	0
54	MG	1T	203	1/1	0.88	0.12	60,60,60,60	0
54	MG	1T	204	1/1	0.88	0.14	65,65,65,65	0
54	MG	1A	3399	1/1	0.88	0.15	28,28,28,28	0
54	MG	2A	3276	1/1	0.88	0.09	68,68,68,68	0
54	MG	1a	1812	1/1	0.88	0.07	82,82,82,82	0
54	MG	1A	3798	1/1	0.88	0.20	38,38,38,38	0
54	MG	2A	3096	1/1	0.88	0.12	69,69,69,69	0
54	MG	2A	3288	1/1	0.88	0.16	45,45,45,45	0
54	MG	1A	3289	1/1	0.88	0.20	55,55,55,55	0
54	MG	2A	3100	1/1	0.88	0.08	58,58,58,58	0
54	MG	1a	1821	1/1	0.88	0.09	79,79,79,79	0
54	MG	1A	3429	1/1	0.88	0.16	67,67,67,67	0
54	MG	2a	3139	1/1	0.88	0.14	68,68,68,68	0
54	MG	1A	3469	1/1	0.88	0.17	33,33,33,33	0
54	MG	1A	3520	1/1	0.88	0.18	38,38,38,38	0
54	MG	1A	3560	1/1	0.88	0.12	78,78,78,78	0
54	MG	1a	1692	1/1	0.88	0.07	75,75,75,75	0
54	MG	1A	3816	1/1	0.88	0.07	45,45,45,45	0
54	MG	10	109	1/1	0.88	0.17	59,59,59,59	0
54	MG	1A	3817	1/1	0.88	0.14	53,53,53,53	0
54	MG	2A	3522	1/1	0.88	0.12	39,39,39,39	0
54	MG	1a	1835	1/1	0.88	0.14	55,55,55,55	0
54	MG	2A	3714	1/1	0.88	0.15	65,65,65,65	0
54	MG	2A	3526	1/1	0.88	0.07	71,71,71,71	0
54	MG	1a	1837	1/1	0.88	0.10	65,65,65,65	0
54	MG	2A	3723	1/1	0.88	0.29	62,62,62,62	0
54	MG	2A	3347	1/1	0.88	0.15	41,41,41,41	0
54	MG	2A	3155	1/1	0.88	0.13	57,57,57,57	0
57	MPD	2A	3728	8/8	0.88	0.16	51,65,69,71	0
54	MG	2A	3156	1/1	0.88	0.21	58,58,58,58	0
58	ZN	2Y	501	1/1	0.88	0.13	91,91,91,91	0
54	MG	1A	3371	1/1	0.89	0.16	62,62,62,62	0
54	MG	1a	1664	1/1	0.89	0.18	75,75,75,75	0
54	MG	1A	3973	1/1	0.89	0.20	43,43,43,43	0
54	MG	2A	3002	1/1	0.89	0.13	55,55,55,55	0
54	MG	2A	3569	1/1	0.89	0.25	57,57,57,57	0
54	MG	1A	3729	1/1	0.89	0.12	54,54,54,54	0
54	MG	2A	3009	1/1	0.89	0.26	46,46,46,46	0
54	MG	2A	3017	1/1	0.89	0.11	67,67,67,67	0
54	MG	1A	3845	1/1	0.89	0.27	63,63,63,63	0
54	MG	1A	3978	1/1	0.89	0.24	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3376	1/1	0.89	0.27	31,31,31,31	0
54	MG	1A	3781	1/1	0.89	0.15	32,32,32,32	0
54	MG	1A	3201	1/1	0.89	0.21	72,72,72,72	0
54	MG	1A	3420	1/1	0.89	0.23	64,64,64,64	0
54	MG	1A	3457	1/1	0.89	0.16	55,55,55,55	0
54	MG	2A	3419	1/1	0.89	0.20	67,67,67,67	0
54	MG	1A	3060	1/1	0.89	0.09	62,62,62,62	0
54	MG	2a	3006	1/1	0.89	0.08	69,69,69,69	0
54	MG	2A	3235	1/1	0.89	0.24	77,77,77,77	0
54	MG	2A	3422	1/1	0.89	0.14	68,68,68,68	0
54	MG	1A	3337	1/1	0.89	0.10	57,57,57,57	0
54	MG	2A	3606	1/1	0.89	0.17	46,46,46,46	0
54	MG	1A	3425	1/1	0.89	0.13	62,62,62,62	0
54	MG	2a	3022	1/1	0.89	0.32	75,75,75,75	0
54	MG	2a	3023	1/1	0.89	0.09	71,71,71,71	0
54	MG	2A	3052	1/1	0.89	0.11	59,59,59,59	0
54	MG	1a	1813	1/1	0.89	0.06	67,67,67,67	0
54	MG	1A	3565	1/1	0.89	0.25	63,63,63,63	0
54	MG	2A	3436	1/1	0.89	0.14	58,58,58,58	0
54	MG	1A	3869	1/1	0.89	0.13	67,67,67,67	0
54	MG	1a	1819	1/1	0.89	0.16	51,51,51,51	0
54	MG	2a	3042	1/1	0.89	0.16	70,70,70,70	0
54	MG	2A	3441	1/1	0.89	0.08	64,64,64,64	0
54	MG	1A	3207	1/1	0.89	0.12	43,43,43,43	0
54	MG	1A	3136	1/1	0.89	0.14	69,69,69,69	0
54	MG	2A	3448	1/1	0.89	0.12	63,63,63,63	0
54	MG	2A	3451	1/1	0.89	0.11	78,78,78,78	0
54	MG	1A	3010	1/1	0.89	0.18	49,49,49,49	0
54	MG	2A	3261	1/1	0.89	0.33	51,51,51,51	0
54	MG	15	103	1/1	0.89	0.37	50,50,50,50	0
54	MG	2A	3456	1/1	0.89	0.10	66,66,66,66	0
54	MG	2A	3460	1/1	0.89	0.16	39,39,39,39	0
54	MG	2A	3265	1/1	0.89	0.26	67,67,67,67	0
54	MG	2A	3646	1/1	0.89	0.20	57,57,57,57	0
54	MG	1A	3475	1/1	0.89	0.17	26,26,26,26	0
54	MG	2a	3062	1/1	0.89	0.19	65,65,65,65	0
54	MG	2a	3067	1/1	0.89	0.30	78,78,78,78	0
54	MG	1A	3941	1/1	0.89	0.16	68,68,68,68	0
54	MG	2A	3274	1/1	0.89	0.15	71,71,71,71	0
54	MG	1A	3876	1/1	0.89	0.18	38,38,38,38	0
54	MG	1A	3148	1/1	0.89	0.30	62,62,62,62	0
54	MG	1B	225	1/1	0.89	0.10	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3270	1/1	0.89	0.12	67,67,67,67	0
54	MG	1A	3885	1/1	0.89	0.08	54,54,54,54	0
54	MG	2a	3079	1/1	0.89	0.15	74,74,74,74	0
54	MG	2A	3138	1/1	0.89	0.21	67,67,67,67	0
54	MG	1a	1735	1/1	0.89	0.13	75,75,75,75	0
54	MG	2A	3140	1/1	0.89	0.10	67,67,67,67	0
54	MG	1a	1609	1/1	0.89	0.14	59,59,59,59	0
54	MG	1A	3703	1/1	0.89	0.20	64,64,64,64	0
54	MG	1a	1745	1/1	0.89	0.23	64,64,64,64	0
54	MG	1A	3952	1/1	0.89	0.20	47,47,47,47	0
54	MG	1D	301	1/1	0.89	0.16	73,73,73,73	0
54	MG	1D	309	1/1	0.89	0.34	47,47,47,47	0
54	MG	2a	3106	1/1	0.89	0.10	71,71,71,71	0
54	MG	1D	312	1/1	0.89	0.19	59,59,59,59	0
54	MG	1D	313	1/1	0.89	0.17	64,64,64,64	0
54	MG	1A	3953	1/1	0.89	0.21	48,48,48,48	0
54	MG	1A	3822	1/1	0.89	0.19	72,72,72,72	0
54	MG	1A	3704	1/1	0.89	0.21	50,50,50,50	0
54	MG	1A	3053	1/1	0.89	0.21	47,47,47,47	0
54	MG	2A	3166	1/1	0.89	0.26	65,65,65,65	0
54	MG	2A	3512	1/1	0.89	0.14	49,49,49,49	0
54	MG	1A	3655	1/1	0.89	0.34	68,68,68,68	0
54	MG	2A	3350	1/1	0.89	0.13	55,55,55,55	0
54	MG	1d	303	1/1	0.89	0.18	73,73,73,73	0
54	MG	2a	3135	1/1	0.89	0.13	68,68,68,68	0
54	MG	1A	3724	1/1	0.89	0.19	58,58,58,58	0
54	MG	2A	3354	1/1	0.89	0.16	80,80,80,80	0
54	MG	1F	312	1/1	0.89	0.12	30,30,30,30	0
54	MG	2A	3365	1/1	0.89	0.21	55,55,55,55	0
54	MG	2A	3176	1/1	0.89	0.15	48,48,48,48	0
54	MG	1g	202	1/1	0.89	0.11	80,80,80,80	0
54	MG	2B	203	1/1	0.89	0.30	68,68,68,68	0
54	MG	1a	1774	1/1	0.89	0.06	82,82,82,82	0
54	MG	1a	1646	1/1	0.89	0.20	68,68,68,68	0
54	MG	2B	208	1/1	0.89	0.15	66,66,66,66	0
54	MG	1F	313	1/1	0.89	0.58	52,52,52,52	0
54	MG	2A	3378	1/1	0.89	0.13	61,61,61,61	0
54	MG	2A	3379	1/1	0.89	0.28	74,74,74,74	0
54	MG	2e	201	1/1	0.89	0.28	66,66,66,66	0
54	MG	2f	201	1/1	0.89	0.13	60,60,60,60	0
54	MG	1a	1780	1/1	0.89	0.14	70,70,70,70	0
54	MG	2p	101	1/1	0.89	0.15	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3185	1/1	0.89	0.14	62,62,62,62	0
54	MG	1A	3897	1/1	0.89	0.25	71,71,71,71	0
54	MG	2B	218	1/1	0.89	0.13	65,65,65,65	0
54	MG	1H	201	1/1	0.89	0.16	70,70,70,70	0
54	MG	2A	3388	1/1	0.89	0.09	72,72,72,72	0
54	MG	2A	3390	1/1	0.89	0.18	35,35,35,35	0
54	MG	2A	3194	1/1	0.90	0.30	65,65,65,65	0
54	MG	1a	1804	1/1	0.90	0.07	72,72,72,72	0
54	MG	1A	3738	1/1	0.90	0.29	67,67,67,67	0
54	MG	1A	3004	1/1	0.90	0.17	50,50,50,50	0
54	MG	2A	3204	1/1	0.90	0.17	69,69,69,69	0
54	MG	2A	3565	1/1	0.90	0.13	45,45,45,45	0
54	MG	1a	1809	1/1	0.90	0.07	82,82,82,82	0
54	MG	2A	3036	1/1	0.90	0.21	53,53,53,53	0
54	MG	2A	3038	1/1	0.90	0.19	59,59,59,59	0
54	MG	2A	3216	1/1	0.90	0.11	46,46,46,46	0
54	MG	2P	202	1/1	0.90	0.11	64,64,64,64	0
54	MG	2A	3409	1/1	0.90	0.18	64,64,64,64	0
54	MG	2A	3040	1/1	0.90	0.13	68,68,68,68	0
54	MG	2A	3579	1/1	0.90	0.16	64,64,64,64	0
54	MG	2A	3043	1/1	0.90	0.28	73,73,73,73	0
54	MG	2A	3224	1/1	0.90	0.25	58,58,58,58	0
54	MG	1A	3866	1/1	0.90	0.19	78,78,78,78	0
54	MG	28	101	1/1	0.90	0.19	62,62,62,62	0
54	MG	2A	3415	1/1	0.90	0.14	54,54,54,54	0
54	MG	2A	3417	1/1	0.90	0.35	64,64,64,64	0
54	MG	1a	1687	1/1	0.90	0.16	72,72,72,72	0
54	MG	1A	3456	1/1	0.90	0.15	50,50,50,50	0
54	MG	1A	3672	1/1	0.90	0.27	64,64,64,64	0
54	MG	1A	3623	1/1	0.90	0.27	42,42,42,42	0
54	MG	1a	1818	1/1	0.90	0.11	54,54,54,54	0
54	MG	2a	3012	1/1	0.90	0.19	65,65,65,65	0
54	MG	2a	3014	1/1	0.90	0.15	73,73,73,73	0
54	MG	2a	3018	1/1	0.90	0.09	74,74,74,74	0
54	MG	2a	3019	1/1	0.90	0.19	53,53,53,53	0
54	MG	1a	1694	1/1	0.90	0.10	70,70,70,70	0
54	MG	1a	1696	1/1	0.90	0.13	82,82,82,82	0
54	MG	1A	3587	1/1	0.90	0.10	46,46,46,46	0
54	MG	1a	1702	1/1	0.90	0.08	77,77,77,77	0
54	MG	2A	3611	1/1	0.90	0.08	69,69,69,69	0
54	MG	2A	3432	1/1	0.90	0.09	64,64,64,64	0
54	MG	2A	3435	1/1	0.90	0.08	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3618	1/1	0.90	0.10	43,43,43,43	0
54	MG	2a	3039	1/1	0.90	0.12	73,73,73,73	0
54	MG	1A	3254	1/1	0.90	0.19	74,74,74,74	0
54	MG	2A	3082	1/1	0.90	0.13	63,63,63,63	0
54	MG	2A	3250	1/1	0.90	0.33	74,74,74,74	0
54	MG	2A	3624	1/1	0.90	0.24	53,53,53,53	0
54	MG	2a	3046	1/1	0.90	0.19	78,78,78,78	0
54	MG	1A	3814	1/1	0.90	0.17	51,51,51,51	0
54	MG	2A	3626	1/1	0.90	0.10	59,59,59,59	0
54	MG	2A	3627	1/1	0.90	0.13	66,66,66,66	0
54	MG	2A	3087	1/1	0.90	0.23	52,52,52,52	0
54	MG	1B	227	1/1	0.90	0.14	70,70,70,70	0
54	MG	2A	3260	1/1	0.90	0.19	68,68,68,68	0
54	MG	2A	3095	1/1	0.90	0.15	64,64,64,64	0
54	MG	1A	3212	1/1	0.90	0.14	57,57,57,57	0
54	MG	1A	3493	1/1	0.90	0.10	48,48,48,48	0
54	MG	1A	3036	1/1	0.90	0.20	53,53,53,53	0
54	MG	2A	3106	1/1	0.90	0.14	44,44,44,44	0
54	MG	2A	3459	1/1	0.90	0.12	60,60,60,60	0
54	MG	1A	3755	1/1	0.90	0.20	47,47,47,47	0
54	MG	2a	3066	1/1	0.90	0.24	71,71,71,71	0
54	MG	1A	3820	1/1	0.90	0.12	50,50,50,50	0
54	MG	2A	3121	1/1	0.90	0.10	74,74,74,74	0
54	MG	1a	1840	1/1	0.90	0.16	78,78,78,78	0
54	MG	2A	3128	1/1	0.90	0.14	50,50,50,50	0
54	MG	2A	3129	1/1	0.90	0.17	57,57,57,57	0
54	MG	1A	3092	1/1	0.90	0.18	44,44,44,44	0
54	MG	2A	3137	1/1	0.90	0.09	59,59,59,59	0
54	MG	1a	1620	1/1	0.90	0.14	61,61,61,61	0
54	MG	2A	3300	1/1	0.90	0.15	41,41,41,41	0
54	MG	1A	3574	1/1	0.90	0.17	56,56,56,56	0
54	MG	1A	3759	1/1	0.90	0.07	47,47,47,47	0
54	MG	1A	3760	1/1	0.90	0.11	56,56,56,56	0
54	MG	2A	3482	1/1	0.90	0.19	60,60,60,60	0
54	MG	2A	3674	1/1	0.90	0.17	63,63,63,63	0
54	MG	2A	3145	1/1	0.90	0.19	71,71,71,71	0
54	MG	1A	3892	1/1	0.90	0.21	60,60,60,60	0
54	MG	2a	3098	1/1	0.90	0.28	82,82,82,82	0
54	MG	2a	3100	1/1	0.90	0.09	87,87,87,87	0
54	MG	2A	3492	1/1	0.90	0.29	62,62,62,62	0
54	MG	1A	3894	1/1	0.90	0.25	54,54,54,54	0
54	MG	1A	3506	1/1	0.90	0.07	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3830	1/1	0.90	0.20	53,53,53,53	0
54	MG	2A	3689	1/1	0.90	0.14	54,54,54,54	0
54	MG	2A	3333	1/1	0.90	0.16	39,39,39,39	0
54	MG	2a	3112	1/1	0.90	0.09	83,83,83,83	0
54	MG	2A	3691	1/1	0.90	0.09	62,62,62,62	0
54	MG	1A	3970	1/1	0.90	0.22	43,43,43,43	0
54	MG	1a	1760	1/1	0.90	0.10	68,68,68,68	0
54	MG	2A	3502	1/1	0.90	0.06	61,61,61,61	0
54	MG	1A	3635	1/1	0.90	0.35	55,55,55,55	0
54	MG	2a	3127	1/1	0.90	0.09	77,77,77,77	0
54	MG	1A	3974	1/1	0.90	0.36	44,44,44,44	0
54	MG	2a	3129	1/1	0.90	0.07	76,76,76,76	0
54	MG	2a	3130	1/1	0.90	0.11	59,59,59,59	0
54	MG	1G	202	1/1	0.90	0.17	61,61,61,61	0
54	MG	1A	3439	1/1	0.90	0.10	63,63,63,63	0
54	MG	2a	3133	1/1	0.90	0.11	48,48,48,48	0
54	MG	2A	3162	1/1	0.90	0.15	74,74,74,74	0
54	MG	1A	3900	1/1	0.90	0.17	59,59,59,59	0
54	MG	1a	1651	1/1	0.90	0.17	69,69,69,69	0
54	MG	1A	3902	1/1	0.90	0.24	50,50,50,50	0
54	MG	1A	3605	1/1	0.90	0.21	29,29,29,29	0
54	MG	2A	3719	1/1	0.90	0.15	59,59,59,59	0
54	MG	1R	205	1/1	0.90	0.15	49,49,49,49	0
54	MG	2A	3721	1/1	0.90	0.08	81,81,81,81	0
54	MG	2A	3174	1/1	0.90	0.13	52,52,52,52	0
54	MG	1A	3470	1/1	0.90	0.21	39,39,39,39	0
54	MG	1A	3069	1/1	0.90	0.11	42,42,42,42	0
54	MG	2a	3161	1/1	0.90	0.13	67,67,67,67	0
54	MG	2B	204	1/1	0.90	0.07	80,80,80,80	0
54	MG	2a	3166	1/1	0.90	0.14	72,72,72,72	0
54	MG	1a	1667	1/1	0.90	0.15	68,68,68,68	0
54	MG	2a	3173	1/1	0.90	0.10	58,58,58,58	0
54	MG	2a	3174	1/1	0.90	0.19	62,62,62,62	0
54	MG	1A	3609	1/1	0.90	0.18	63,63,63,63	0
54	MG	1a	1670	1/1	0.90	0.18	68,68,68,68	0
54	MG	1A	3911	1/1	0.90	0.09	49,49,49,49	0
54	MG	2B	210	1/1	0.90	0.10	70,70,70,70	0
54	MG	1A	3041	1/1	0.90	0.17	60,60,60,60	0
54	MG	1A	3583	1/1	0.90	0.30	68,68,68,68	0
54	MG	1V	206	1/1	0.90	0.17	65,65,65,65	0
54	MG	1A	3612	1/1	0.90	0.16	64,64,64,64	0
54	MG	1A	3923	1/1	0.90	0.11	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3343	1/1	0.90	0.11	69,69,69,69	0
54	MG	1B	204	1/1	0.90	0.41	61,61,61,61	0
58	ZN	24	501	1/1	0.90	0.06	122,122,122,122	0
54	MG	2T	201	1/1	0.91	0.10	65,65,65,65	0
54	MG	2A	3259	1/1	0.91	0.17	45,45,45,45	0
54	MG	2A	3601	1/1	0.91	0.09	75,75,75,75	0
54	MG	2A	3433	1/1	0.91	0.09	62,62,62,62	0
54	MG	1A	3401	1/1	0.91	0.28	58,58,58,58	0
54	MG	1A	3837	1/1	0.91	0.16	68,68,68,68	0
54	MG	1A	3715	1/1	0.91	0.18	34,34,34,34	0
54	MG	2A	3133	1/1	0.91	0.13	44,44,44,44	0
54	MG	2A	3610	1/1	0.91	0.06	64,64,64,64	0
54	MG	1A	3369	1/1	0.91	0.13	56,56,56,56	0
54	MG	1A	3846	1/1	0.91	0.20	40,40,40,40	0
54	MG	1A	3718	1/1	0.91	0.14	49,49,49,49	0
54	MG	1A	3721	1/1	0.91	0.27	57,57,57,57	0
54	MG	2A	3619	1/1	0.91	0.17	56,56,56,56	0
54	MG	2A	3449	1/1	0.91	0.12	62,62,62,62	0
54	MG	1A	3775	1/1	0.91	0.33	55,55,55,55	0
54	MG	1A	3723	1/1	0.91	0.27	66,66,66,66	0
54	MG	1d	305	1/1	0.91	0.12	89,89,89,89	0
54	MG	1A	3650	1/1	0.91	0.12	58,58,58,58	0
54	MG	1A	3654	1/1	0.91	0.06	52,52,52,52	0
54	MG	1A	3922	1/1	0.91	0.08	71,71,71,71	0
54	MG	1h	202	1/1	0.91	0.08	68,68,68,68	0
54	MG	2A	3153	1/1	0.91	0.11	50,50,50,50	0
54	MG	2A	3154	1/1	0.91	0.12	52,52,52,52	0
54	MG	1A	3501	1/1	0.91	0.19	37,37,37,37	0
54	MG	2A	3308	1/1	0.91	0.18	81,81,81,81	0
54	MG	2A	3467	1/1	0.91	0.08	72,72,72,72	0
54	MG	2A	3310	1/1	0.91	0.28	66,66,66,66	0
54	MG	1A	3988	1/1	0.91	0.19	54,54,54,54	0
54	MG	2A	3315	1/1	0.91	0.14	58,58,58,58	0
54	MG	2A	3642	1/1	0.91	0.14	40,40,40,40	0
54	MG	2A	3322	1/1	0.91	0.17	55,55,55,55	0
54	MG	1A	3614	1/1	0.91	0.21	45,45,45,45	0
54	MG	1A	3096	1/1	0.91	0.22	60,60,60,60	0
54	MG	1A	3927	1/1	0.91	0.13	59,59,59,59	0
54	MG	2A	3654	1/1	0.91	0.11	67,67,67,67	0
54	MG	1A	3557	1/1	0.91	0.29	54,54,54,54	0
54	MG	2A	3163	1/1	0.91	0.20	69,69,69,69	0
54	MG	1A	3800	1/1	0.91	0.08	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3485	1/1	0.91	0.18	62,62,62,62	0
54	MG	1W	204	1/1	0.91	0.24	59,59,59,59	0
54	MG	1A	3464	1/1	0.91	0.20	28,28,28,28	0
54	MG	2A	3663	1/1	0.91	0.08	66,66,66,66	0
54	MG	1A	3663	1/1	0.91	0.07	80,80,80,80	0
54	MG	2A	3494	1/1	0.91	0.10	65,65,65,65	0
54	MG	2A	3669	1/1	0.91	0.13	67,67,67,67	0
54	MG	1B	210	1/1	0.91	0.15	56,56,56,56	0
54	MG	2A	3014	1/1	0.91	0.11	58,58,58,58	0
54	MG	1A	3467	1/1	0.91	0.15	38,38,38,38	0
54	MG	1B	214	1/1	0.91	0.17	67,67,67,67	0
54	MG	10	108	1/1	0.91	0.13	61,61,61,61	0
54	MG	1a	1803	1/1	0.91	0.13	76,76,76,76	0
54	MG	1B	215	1/1	0.91	0.12	56,56,56,56	0
54	MG	2A	3355	1/1	0.91	0.11	64,64,64,64	0
54	MG	2A	3359	1/1	0.91	0.11	55,55,55,55	0
54	MG	1A	3183	1/1	0.91	0.24	64,64,64,64	0
54	MG	2a	3084	1/1	0.91	0.23	61,61,61,61	0
54	MG	1A	3812	1/1	0.91	0.20	61,61,61,61	0
54	MG	1A	3252	1/1	0.91	0.15	44,44,44,44	0
54	MG	2A	3513	1/1	0.91	0.17	41,41,41,41	0
54	MG	1A	3471	1/1	0.91	0.21	46,46,46,46	0
54	MG	1A	3147	1/1	0.91	0.17	37,37,37,37	0
54	MG	2A	3519	1/1	0.91	0.12	62,62,62,62	0
54	MG	1a	1602	1/1	0.91	0.13	71,71,71,71	0
54	MG	2A	3376	1/1	0.91	0.17	36,36,36,36	0
54	MG	2A	3191	1/1	0.91	0.48	63,63,63,63	0
54	MG	2a	3105	1/1	0.91	0.16	64,64,64,64	0
54	MG	2A	3706	1/1	0.91	0.17	62,62,62,62	0
54	MG	1A	3628	1/1	0.91	0.20	67,67,67,67	0
54	MG	2A	3708	1/1	0.91	0.07	68,68,68,68	0
54	MG	2A	3047	1/1	0.91	0.21	64,64,64,64	0
54	MG	1a	1700	1/1	0.91	0.17	68,68,68,68	0
54	MG	1A	3077	1/1	0.91	0.14	58,58,58,58	0
54	MG	2a	3115	1/1	0.91	0.09	67,67,67,67	0
54	MG	2A	3716	1/1	0.91	0.08	56,56,56,56	0
54	MG	1A	3353	1/1	0.91	0.18	53,53,53,53	0
54	MG	2A	3534	1/1	0.91	0.15	56,56,56,56	0
54	MG	2a	3122	1/1	0.91	0.12	74,74,74,74	0
54	MG	2a	3124	1/1	0.91	0.13	62,62,62,62	0
54	MG	2A	3201	1/1	0.91	0.11	66,66,66,66	0
54	MG	2A	3539	1/1	0.91	0.51	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3632	1/1	0.91	0.17	71,71,71,71	0
54	MG	2A	3203	1/1	0.91	0.18	65,65,65,65	0
54	MG	2A	3727	1/1	0.91	0.18	46,46,46,46	0
54	MG	1A	3954	1/1	0.91	0.15	57,57,57,57	0
54	MG	1A	3256	1/1	0.91	0.11	49,49,49,49	0
54	MG	1a	1719	1/1	0.91	0.12	56,56,56,56	0
54	MG	2A	3211	1/1	0.91	0.44	48,48,48,48	0
54	MG	1A	3957	1/1	0.91	0.13	40,40,40,40	0
54	MG	2a	3137	1/1	0.91	0.18	54,54,54,54	0
54	MG	1a	1615	1/1	0.91	0.11	69,69,69,69	0
54	MG	2A	3075	1/1	0.91	0.11	69,69,69,69	0
54	MG	1a	1725	1/1	0.91	0.10	73,73,73,73	0
54	MG	1A	3395	1/1	0.91	0.24	55,55,55,55	0
54	MG	2A	3083	1/1	0.91	0.23	61,61,61,61	0
54	MG	2B	214	1/1	0.91	0.18	68,68,68,68	0
54	MG	1a	1619	1/1	0.91	0.14	59,59,59,59	0
54	MG	2B	216	1/1	0.91	0.23	64,64,64,64	0
54	MG	1a	1731	1/1	0.91	0.23	74,74,74,74	0
54	MG	1A	3959	1/1	0.91	0.05	64,64,64,64	0
54	MG	2D	305	1/1	0.91	0.14	55,55,55,55	0
54	MG	2A	3094	1/1	0.91	0.16	53,53,53,53	0
54	MG	2A	3571	1/1	0.91	0.31	55,55,55,55	0
54	MG	1D	314	1/1	0.91	0.09	76,76,76,76	0
54	MG	1a	1739	1/1	0.91	0.09	56,56,56,56	0
54	MG	1A	3455	1/1	0.91	0.23	62,62,62,62	0
54	MG	1a	1742	1/1	0.91	0.12	52,52,52,52	0
54	MG	2E	304	1/1	0.91	0.10	56,56,56,56	0
54	MG	2f	202	1/1	0.91	0.08	81,81,81,81	0
54	MG	2E	306	1/1	0.91	0.16	73,73,73,73	0
54	MG	1A	3015	1/1	0.91	0.23	48,48,48,48	0
54	MG	2A	3109	1/1	0.91	0.22	67,67,67,67	0
56	ARG	1B	232	12/12	0.91	0.18	37,47,60,63	0
54	MG	1A	3326	1/1	0.91	0.19	35,35,35,35	0
54	MG	2A	3117	1/1	0.91	0.14	73,73,73,73	0
54	MG	1E	308	1/1	0.91	0.23	31,31,31,31	0
54	MG	2A	3253	1/1	0.91	0.18	62,62,62,62	0
54	MG	1a	1851	1/1	0.91	0.16	61,61,61,61	0
54	MG	1A	3705	1/1	0.91	0.14	64,64,64,64	0
54	MG	1B	201	1/1	0.92	0.13	71,71,71,71	0
54	MG	2A	3326	1/1	0.92	0.16	55,55,55,55	0
54	MG	2A	3124	1/1	0.92	0.26	58,58,58,58	0
54	MG	1a	1820	1/1	0.92	0.08	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3679	1/1	0.92	0.09	53,53,53,53	0
54	MG	1A	3161	1/1	0.92	0.10	70,70,70,70	0
54	MG	2A	3132	1/1	0.92	0.33	63,63,63,63	0
54	MG	2A	3339	1/1	0.92	0.09	48,48,48,48	0
54	MG	2A	3342	1/1	0.92	0.11	48,48,48,48	0
54	MG	1A	3468	1/1	0.92	0.15	35,35,35,35	0
54	MG	1A	3382	1/1	0.92	0.19	37,37,37,37	0
54	MG	1B	208	1/1	0.92	0.41	69,69,69,69	0
54	MG	1A	3539	1/1	0.92	0.21	47,47,47,47	0
54	MG	1A	3688	1/1	0.92	0.17	59,59,59,59	0
54	MG	2A	3141	1/1	0.92	0.09	70,70,70,70	0
54	MG	1A	3319	1/1	0.92	0.21	32,32,32,32	0
54	MG	1A	3287	1/1	0.92	0.33	41,41,41,41	0
54	MG	1a	1701	1/1	0.92	0.24	73,73,73,73	0
54	MG	1a	1836	1/1	0.92	0.08	71,71,71,71	0
54	MG	1A	3171	1/1	0.92	0.09	69,69,69,69	0
54	MG	1a	1703	1/1	0.92	0.13	69,69,69,69	0
54	MG	2R	201	1/1	0.92	0.24	59,59,59,59	0
54	MG	2A	3563	1/1	0.92	0.16	37,37,37,37	0
54	MG	2A	3363	1/1	0.92	0.14	61,61,61,61	0
54	MG	15	106	1/1	0.92	0.25	74,74,74,74	0
54	MG	2V	203	1/1	0.92	0.35	68,68,68,68	0
54	MG	2A	3366	1/1	0.92	0.29	80,80,80,80	0
54	MG	2A	3368	1/1	0.92	0.14	44,44,44,44	0
54	MG	15	107	1/1	0.92	0.14	32,32,32,32	0
54	MG	2a	3002	1/1	0.92	0.12	63,63,63,63	0
54	MG	1a	1846	1/1	0.92	0.17	75,75,75,75	0
54	MG	1A	3856	1/1	0.92	0.10	57,57,57,57	0
54	MG	1a	1709	1/1	0.92	0.20	63,63,63,63	0
54	MG	2A	3375	1/1	0.92	0.09	65,65,65,65	0
54	MG	1a	1711	1/1	0.92	0.21	71,71,71,71	0
54	MG	17	102	1/1	0.92	0.12	36,36,36,36	0
54	MG	1A	3864	1/1	0.92	0.20	32,32,32,32	0
54	MG	1a	1720	1/1	0.92	0.16	39,39,39,39	0
54	MG	1A	3701	1/1	0.92	0.05	75,75,75,75	0
54	MG	2a	3016	1/1	0.92	0.15	73,73,73,73	0
54	MG	2a	3017	1/1	0.92	0.09	53,53,53,53	0
54	MG	1A	3434	1/1	0.92	0.15	47,47,47,47	0
54	MG	2A	3591	1/1	0.92	0.13	50,50,50,50	0
54	MG	1a	1856	1/1	0.92	0.19	77,77,77,77	0
54	MG	2A	3594	1/1	0.92	0.11	55,55,55,55	0
54	MG	1A	3046	1/1	0.92	0.20	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3787	1/1	0.92	0.27	50,50,50,50	0
54	MG	2A	3172	1/1	0.92	0.14	53,53,53,53	0
54	MG	2a	3026	1/1	0.92	0.11	64,64,64,64	0
54	MG	2a	3027	1/1	0.92	0.09	58,58,58,58	0
54	MG	1A	3142	1/1	0.92	0.12	49,49,49,49	0
54	MG	1a	1730	1/1	0.92	0.09	82,82,82,82	0
54	MG	1A	3947	1/1	0.92	0.18	51,51,51,51	0
54	MG	1A	3637	1/1	0.92	0.11	60,60,60,60	0
54	MG	1a	1736	1/1	0.92	0.15	61,61,61,61	0
54	MG	1A	3079	1/1	0.92	0.29	46,46,46,46	0
54	MG	1D	303	1/1	0.92	0.57	70,70,70,70	0
54	MG	1A	3643	1/1	0.92	0.15	20,20,20,20	0
54	MG	2A	3612	1/1	0.92	0.11	68,68,68,68	0
54	MG	2A	3406	1/1	0.92	0.21	75,75,75,75	0
54	MG	1A	3644	1/1	0.92	0.21	75,75,75,75	0
54	MG	1a	1743	1/1	0.92	0.09	68,68,68,68	0
54	MG	1a	1744	1/1	0.92	0.14	72,72,72,72	0
54	MG	1A	3442	1/1	0.92	0.12	69,69,69,69	0
54	MG	1a	1622	1/1	0.92	0.08	56,56,56,56	0
54	MG	1A	3444	1/1	0.92	0.15	52,52,52,52	0
54	MG	1a	1750	1/1	0.92	0.08	63,63,63,63	0
54	MG	1A	3300	1/1	0.92	0.38	63,63,63,63	0
54	MG	1A	3648	1/1	0.92	0.48	41,41,41,41	0
54	MG	1y	202	1/1	0.92	0.07	80,80,80,80	0
54	MG	2A	3197	1/1	0.92	0.44	54,54,54,54	0
54	MG	1a	1754	1/1	0.92	0.07	68,68,68,68	0
54	MG	2a	3065	1/1	0.92	0.12	70,70,70,70	0
54	MG	1A	3649	1/1	0.92	0.05	69,69,69,69	0
54	MG	1E	307	1/1	0.92	0.07	46,46,46,46	0
54	MG	2A	3008	1/1	0.92	0.23	44,44,44,44	0
54	MG	1A	3211	1/1	0.92	0.12	42,42,42,42	0
54	MG	2A	3012	1/1	0.92	0.10	64,64,64,64	0
54	MG	1a	1634	1/1	0.92	0.14	71,71,71,71	0
54	MG	1A	3407	1/1	0.92	0.23	31,31,31,31	0
54	MG	2A	3212	1/1	0.92	0.22	63,63,63,63	0
54	MG	2A	3022	1/1	0.92	0.45	52,52,52,52	0
54	MG	1E	310	1/1	0.92	0.17	36,36,36,36	0
54	MG	2A	3649	1/1	0.92	0.12	45,45,45,45	0
54	MG	1a	1767	1/1	0.92	0.18	71,71,71,71	0
54	MG	1a	1639	1/1	0.92	0.10	73,73,73,73	0
54	MG	2A	3653	1/1	0.92	0.27	63,63,63,63	0
54	MG	1A	3113	1/1	0.92	0.16	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1770	1/1	0.92	0.15	65,65,65,65	0
54	MG	1a	1772	1/1	0.92	0.12	64,64,64,64	0
54	MG	2A	3231	1/1	0.92	0.26	56,56,56,56	0
54	MG	1A	3150	1/1	0.92	0.13	52,52,52,52	0
54	MG	2A	3450	1/1	0.92	0.16	54,54,54,54	0
54	MG	1a	1642	1/1	0.92	0.10	56,56,56,56	0
54	MG	1a	1775	1/1	0.92	0.10	80,80,80,80	0
54	MG	2a	3104	1/1	0.92	0.07	69,69,69,69	0
54	MG	2A	3664	1/1	0.92	0.07	76,76,76,76	0
54	MG	2A	3041	1/1	0.92	0.06	65,65,65,65	0
54	MG	1a	1643	1/1	0.92	0.11	64,64,64,64	0
54	MG	2A	3455	1/1	0.92	0.15	75,75,75,75	0
54	MG	1A	3742	1/1	0.92	0.16	51,51,51,51	0
54	MG	2A	3672	1/1	0.92	0.09	73,73,73,73	0
54	MG	2A	3458	1/1	0.92	0.14	76,76,76,76	0
54	MG	2a	3114	1/1	0.92	0.15	64,64,64,64	0
54	MG	1A	3033	1/1	0.92	0.15	63,63,63,63	0
54	MG	1A	3073	1/1	0.92	0.27	50,50,50,50	0
54	MG	1a	1650	1/1	0.92	0.12	77,77,77,77	0
54	MG	1F	316	1/1	0.92	0.35	49,49,49,49	0
54	MG	1a	1652	1/1	0.92	0.12	50,50,50,50	0
54	MG	1A	3513	1/1	0.92	0.10	54,54,54,54	0
54	MG	1A	3236	1/1	0.92	0.16	47,47,47,47	0
54	MG	1A	3977	1/1	0.92	0.20	46,46,46,46	0
54	MG	2A	3257	1/1	0.92	0.26	57,57,57,57	0
54	MG	1A	3618	1/1	0.92	0.11	59,59,59,59	0
54	MG	2A	3692	1/1	0.92	0.18	65,65,65,65	0
54	MG	2A	3062	1/1	0.92	0.44	54,54,54,54	0
54	MG	2A	3694	1/1	0.92	0.08	56,56,56,56	0
54	MG	2A	3695	1/1	0.92	0.15	50,50,50,50	0
54	MG	2A	3474	1/1	0.92	0.14	45,45,45,45	0
54	MG	1P	203	1/1	0.92	0.10	35,35,35,35	0
54	MG	1A	3824	1/1	0.92	0.16	38,38,38,38	0
54	MG	2a	3138	1/1	0.92	0.11	73,73,73,73	0
54	MG	2A	3076	1/1	0.92	0.27	77,77,77,77	0
54	MG	2A	3703	1/1	0.92	0.07	73,73,73,73	0
54	MG	1a	1793	1/1	0.92	0.06	77,77,77,77	0
54	MG	1Q	204	1/1	0.92	0.20	62,62,62,62	0
54	MG	2A	3270	1/1	0.92	0.25	74,74,74,74	0
54	MG	1a	1669	1/1	0.92	0.09	69,69,69,69	0
54	MG	1a	1798	1/1	0.92	0.09	81,81,81,81	0
54	MG	2A	3490	1/1	0.92	0.17	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1799	1/1	0.92	0.49	70,70,70,70	0
54	MG	1A	3668	1/1	0.92	0.32	79,79,79,79	0
54	MG	1A	3669	1/1	0.92	0.31	71,71,71,71	0
54	MG	1a	1672	1/1	0.92	0.11	58,58,58,58	0
54	MG	1A	3313	1/1	0.92	0.16	33,33,33,33	0
54	MG	2a	3172	1/1	0.92	0.11	67,67,67,67	0
54	MG	2A	3284	1/1	0.92	0.10	51,51,51,51	0
54	MG	2A	3499	1/1	0.92	0.11	78,78,78,78	0
54	MG	1A	3909	1/1	0.92	0.24	64,64,64,64	0
54	MG	2a	3178	1/1	0.92	0.06	77,77,77,77	0
54	MG	2A	3294	1/1	0.92	0.15	58,58,58,58	0
54	MG	2A	3098	1/1	0.92	0.22	69,69,69,69	0
54	MG	2A	3099	1/1	0.92	0.13	78,78,78,78	0
54	MG	1A	3671	1/1	0.92	0.18	47,47,47,47	0
54	MG	2j	201	1/1	0.92	0.13	73,73,73,73	0
54	MG	2A	3105	1/1	0.92	0.16	48,48,48,48	0
54	MG	2r	101	1/1	0.92	0.15	72,72,72,72	0
54	MG	1A	3100	1/1	0.92	0.27	55,55,55,55	0
54	MG	1A	3284	1/1	0.92	0.35	69,69,69,69	0
57	MPD	1A	3999	8/8	0.92	0.14	50,53,61,63	0
54	MG	2A	3113	1/1	0.92	0.08	83,83,83,83	0
54	MG	1A	3466	1/1	0.92	0.22	27,27,27,27	0
54	MG	1A	3844	1/1	0.92	0.24	43,43,43,43	0
54	MG	2A	3320	1/1	0.92	0.17	37,37,37,37	0
54	MG	1a	1817	1/1	0.92	0.13	78,78,78,78	0
54	MG	1W	203	1/1	0.92	0.14	41,41,41,41	0
54	MG	1A	3435	1/1	0.93	0.06	53,53,53,53	0
54	MG	1A	3503	1/1	0.93	0.13	40,40,40,40	0
54	MG	1A	3778	1/1	0.93	0.16	54,54,54,54	0
54	MG	2A	3311	1/1	0.93	0.18	52,52,52,52	0
54	MG	2A	3108	1/1	0.93	0.11	53,53,53,53	0
54	MG	2A	3314	1/1	0.93	0.13	61,61,61,61	0
54	MG	1A	3596	1/1	0.93	0.24	37,37,37,37	0
54	MG	2A	3110	1/1	0.93	0.27	44,44,44,44	0
54	MG	1a	1655	1/1	0.93	0.22	75,75,75,75	0
54	MG	1A	3782	1/1	0.93	0.16	48,48,48,48	0
54	MG	1a	1659	1/1	0.93	0.14	69,69,69,69	0
54	MG	1a	1810	1/1	0.93	0.11	64,64,64,64	0
54	MG	2A	3120	1/1	0.93	0.14	69,69,69,69	0
54	MG	1a	1660	1/1	0.93	0.07	73,73,73,73	0
54	MG	1A	3901	1/1	0.93	0.11	70,70,70,70	0
54	MG	2A	3537	1/1	0.93	0.21	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3785	1/1	0.93	0.11	39,39,39,39	0
54	MG	1A	3054	1/1	0.93	0.17	65,65,65,65	0
54	MG	1A	3788	1/1	0.93	0.06	58,58,58,58	0
54	MG	2A	3340	1/1	0.93	0.11	67,67,67,67	0
54	MG	1A	3375	1/1	0.93	0.20	37,37,37,37	0
54	MG	2A	3545	1/1	0.93	0.17	57,57,57,57	0
54	MG	2A	3344	1/1	0.93	0.19	44,44,44,44	0
54	MG	1A	3262	1/1	0.93	0.35	38,38,38,38	0
54	MG	2A	3551	1/1	0.93	0.07	66,66,66,66	0
54	MG	1A	3512	1/1	0.93	0.20	60,60,60,60	0
54	MG	2V	201	1/1	0.93	0.16	66,66,66,66	0
54	MG	1A	3112	1/1	0.93	0.21	43,43,43,43	0
54	MG	1A	3266	1/1	0.93	0.17	71,71,71,71	0
54	MG	1A	3516	1/1	0.93	0.21	49,49,49,49	0
54	MG	1A	3920	1/1	0.93	0.16	68,68,68,68	0
54	MG	1A	3606	1/1	0.93	0.22	39,39,39,39	0
54	MG	1A	3803	1/1	0.93	0.18	56,56,56,56	0
54	MG	1A	3804	1/1	0.93	0.12	46,46,46,46	0
54	MG	1F	305	1/1	0.93	0.25	40,40,40,40	0
54	MG	1F	306	1/1	0.93	0.18	43,43,43,43	0
54	MG	1A	3088	1/1	0.93	0.18	43,43,43,43	0
54	MG	1A	3689	1/1	0.93	0.19	46,46,46,46	0
54	MG	2A	3572	1/1	0.93	0.12	54,54,54,54	0
54	MG	1a	1683	1/1	0.93	0.20	75,75,75,75	0
54	MG	2A	3151	1/1	0.93	0.15	53,53,53,53	0
54	MG	2A	3576	1/1	0.93	0.21	62,62,62,62	0
54	MG	1A	3808	1/1	0.93	0.09	37,37,37,37	0
54	MG	1A	3012	1/1	0.93	0.16	44,44,44,44	0
54	MG	1A	3811	1/1	0.93	0.14	61,61,61,61	0
54	MG	1A	3163	1/1	0.93	0.12	61,61,61,61	0
54	MG	2A	3373	1/1	0.93	0.18	61,61,61,61	0
54	MG	2A	3587	1/1	0.93	0.11	57,57,57,57	0
54	MG	1a	1845	1/1	0.93	0.08	76,76,76,76	0
54	MG	1A	3393	1/1	0.93	0.13	32,32,32,32	0
54	MG	1a	1691	1/1	0.93	0.10	68,68,68,68	0
54	MG	2A	3160	1/1	0.93	0.18	62,62,62,62	0
54	MG	2A	3161	1/1	0.93	0.11	45,45,45,45	0
54	MG	1A	3698	1/1	0.93	0.11	58,58,58,58	0
54	MG	1A	3451	1/1	0.93	0.18	73,73,73,73	0
54	MG	1a	1695	1/1	0.93	0.08	71,71,71,71	0
54	MG	1A	3454	1/1	0.93	0.11	64,64,64,64	0
54	MG	2A	3603	1/1	0.93	0.13	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3167	1/1	0.93	0.11	66,66,66,66	0
54	MG	2A	3387	1/1	0.93	0.23	49,49,49,49	0
54	MG	1a	1698	1/1	0.93	0.24	69,69,69,69	0
54	MG	1A	3121	1/1	0.93	0.09	50,50,50,50	0
54	MG	1A	3943	1/1	0.93	0.19	68,68,68,68	0
54	MG	1Q	202	1/1	0.93	0.23	56,56,56,56	0
54	MG	1A	3174	1/1	0.93	0.13	56,56,56,56	0
54	MG	1R	203	1/1	0.93	0.31	44,44,44,44	0
54	MG	2a	3053	1/1	0.93	0.15	76,76,76,76	0
54	MG	2A	3398	1/1	0.93	0.32	63,63,63,63	0
54	MG	2A	3615	1/1	0.93	0.11	64,64,64,64	0
54	MG	1R	204	1/1	0.93	0.15	59,59,59,59	0
54	MG	2A	3400	1/1	0.93	0.20	65,65,65,65	0
54	MG	1a	1706	1/1	0.93	0.15	61,61,61,61	0
54	MG	2A	3403	1/1	0.93	0.11	52,52,52,52	0
54	MG	1A	3707	1/1	0.93	0.17	57,57,57,57	0
54	MG	1A	3708	1/1	0.93	0.14	38,38,38,38	0
54	MG	2a	3064	1/1	0.93	0.16	59,59,59,59	0
54	MG	1A	3540	1/1	0.93	0.11	55,55,55,55	0
54	MG	1A	3227	1/1	0.93	0.21	35,35,35,35	0
54	MG	1A	3825	1/1	0.93	0.17	32,32,32,32	0
54	MG	1T	205	1/1	0.93	0.09	73,73,73,73	0
54	MG	1A	3542	1/1	0.93	0.17	55,55,55,55	0
54	MG	2A	3630	1/1	0.93	0.12	56,56,56,56	0
54	MG	1A	3827	1/1	0.93	0.10	44,44,44,44	0
54	MG	1A	3955	1/1	0.93	0.53	56,56,56,56	0
54	MG	1A	3458	1/1	0.93	0.15	54,54,54,54	0
54	MG	1A	3544	1/1	0.93	0.13	64,64,64,64	0
54	MG	1A	3231	1/1	0.93	0.21	62,62,62,62	0
54	MG	1A	3833	1/1	0.93	0.07	74,74,74,74	0
54	MG	1A	3548	1/1	0.93	0.08	56,56,56,56	0
54	MG	1t	202	1/1	0.93	0.09	77,77,77,77	0
54	MG	1A	3962	1/1	0.93	0.28	38,38,38,38	0
54	MG	1A	3044	1/1	0.93	0.12	33,33,33,33	0
54	MG	1A	3336	1/1	0.93	0.10	43,43,43,43	0
54	MG	1A	3552	1/1	0.93	0.12	63,63,63,63	0
54	MG	2a	3094	1/1	0.93	0.08	63,63,63,63	0
54	MG	2A	3003	1/1	0.93	0.17	62,62,62,62	0
54	MG	2a	3097	1/1	0.93	0.10	67,67,67,67	0
54	MG	2A	3207	1/1	0.93	0.14	68,68,68,68	0
54	MG	1A	3967	1/1	0.93	0.14	60,60,60,60	0
54	MG	1A	3034	1/1	0.93	0.22	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3434	1/1	0.93	0.09	51,51,51,51	0
54	MG	1A	3410	1/1	0.93	0.20	35,35,35,35	0
54	MG	1A	3971	1/1	0.93	0.12	62,62,62,62	0
54	MG	1A	3737	1/1	0.93	0.23	60,60,60,60	0
54	MG	1A	3001	1/1	0.93	0.19	41,41,41,41	0
54	MG	1a	1747	1/1	0.93	0.13	67,67,67,67	0
54	MG	1A	3741	1/1	0.93	0.15	65,65,65,65	0
54	MG	2A	3225	1/1	0.93	0.17	37,37,37,37	0
54	MG	1A	3048	1/1	0.93	0.32	47,47,47,47	0
54	MG	2A	3030	1/1	0.93	0.13	61,61,61,61	0
54	MG	1A	3350	1/1	0.93	0.17	46,46,46,46	0
54	MG	1A	3294	1/1	0.93	0.10	38,38,38,38	0
54	MG	1A	3419	1/1	0.93	0.15	46,46,46,46	0
54	MG	1a	1755	1/1	0.93	0.07	62,62,62,62	0
54	MG	2A	3237	1/1	0.93	0.13	48,48,48,48	0
54	MG	2A	3238	1/1	0.93	0.17	64,64,64,64	0
54	MG	1A	3296	1/1	0.93	0.23	54,54,54,54	0
54	MG	1A	3567	1/1	0.93	0.33	62,62,62,62	0
54	MG	1A	3098	1/1	0.93	0.24	43,43,43,43	0
54	MG	1A	3570	1/1	0.93	0.31	56,56,56,56	0
54	MG	2A	3687	1/1	0.93	0.11	60,60,60,60	0
54	MG	1A	3474	1/1	0.93	0.21	32,32,32,32	0
54	MG	1a	1610	1/1	0.93	0.20	59,59,59,59	0
54	MG	1A	3752	1/1	0.93	0.23	28,28,28,28	0
54	MG	1A	3361	1/1	0.93	0.21	65,65,65,65	0
54	MG	1a	1616	1/1	0.93	0.12	67,67,67,67	0
54	MG	2A	3468	1/1	0.93	0.18	34,34,34,34	0
54	MG	2A	3252	1/1	0.93	0.23	69,69,69,69	0
54	MG	1A	3031	1/1	0.93	0.13	38,38,38,38	0
54	MG	2A	3254	1/1	0.93	0.15	46,46,46,46	0
54	MG	2a	3142	1/1	0.93	0.10	60,60,60,60	0
54	MG	2a	3143	1/1	0.93	0.11	61,61,61,61	0
54	MG	2A	3051	1/1	0.93	0.07	71,71,71,71	0
54	MG	1A	3995	1/1	0.93	0.16	57,57,57,57	0
54	MG	2A	3053	1/1	0.93	0.16	41,41,41,41	0
54	MG	1A	3082	1/1	0.93	0.20	54,54,54,54	0
54	MG	1A	3480	1/1	0.93	0.17	69,69,69,69	0
54	MG	1A	3483	1/1	0.93	0.14	37,37,37,37	0
54	MG	2a	3158	1/1	0.93	0.10	71,71,71,71	0
54	MG	1A	3879	1/1	0.93	0.20	38,38,38,38	0
54	MG	1B	205	1/1	0.93	0.17	54,54,54,54	0
54	MG	1a	1629	1/1	0.93	0.17	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3073	1/1	0.93	0.40	50,50,50,50	0
54	MG	2A	3487	1/1	0.93	0.09	65,65,65,65	0
54	MG	2a	3171	1/1	0.93	0.10	75,75,75,75	0
54	MG	2A	3489	1/1	0.93	0.47	72,72,72,72	0
54	MG	1A	3485	1/1	0.93	0.13	64,64,64,64	0
54	MG	1A	3883	1/1	0.93	0.21	45,45,45,45	0
54	MG	1A	3367	1/1	0.93	0.22	62,62,62,62	0
54	MG	2a	3177	1/1	0.93	0.15	77,77,77,77	0
54	MG	1A	3765	1/1	0.93	0.23	60,60,60,60	0
54	MG	1B	211	1/1	0.93	0.23	42,42,42,42	0
54	MG	2A	3722	1/1	0.93	0.64	70,70,70,70	0
54	MG	1a	1786	1/1	0.93	0.08	78,78,78,78	0
54	MG	1A	3659	1/1	0.93	0.14	75,75,75,75	0
54	MG	1A	3489	1/1	0.93	0.15	60,60,60,60	0
54	MG	2B	201	1/1	0.93	0.12	72,72,72,72	0
54	MG	1A	3368	1/1	0.93	0.25	50,50,50,50	0
54	MG	2A	3291	1/1	0.93	0.13	71,71,71,71	0
54	MG	2A	3293	1/1	0.93	0.20	55,55,55,55	0
54	MG	1A	3431	1/1	0.93	0.15	56,56,56,56	0
54	MG	1A	3772	1/1	0.93	0.20	40,40,40,40	0
54	MG	2A	3507	1/1	0.93	0.12	63,63,63,63	0
54	MG	1B	219	1/1	0.93	0.30	58,58,58,58	0
54	MG	1A	3151	1/1	0.93	0.17	39,39,39,39	0
54	MG	1A	3194	1/1	0.93	0.19	40,40,40,40	0
54	MG	2A	3511	1/1	0.93	0.12	36,36,36,36	0
54	MG	1A	3710	1/1	0.94	0.07	58,58,58,58	0
54	MG	2A	3066	1/1	0.94	0.11	54,54,54,54	0
54	MG	1A	3806	1/1	0.94	0.16	35,35,35,35	0
54	MG	2B	202	1/1	0.94	0.19	72,72,72,72	0
54	MG	2A	3269	1/1	0.94	0.14	46,46,46,46	0
54	MG	1A	3022	1/1	0.94	0.12	46,46,46,46	0
54	MG	1A	3545	1/1	0.94	0.14	63,63,63,63	0
54	MG	2A	3077	1/1	0.94	0.24	51,51,51,51	0
54	MG	1A	3114	1/1	0.94	0.17	45,45,45,45	0
54	MG	1a	1635	1/1	0.94	0.12	51,51,51,51	0
54	MG	1A	3116	1/1	0.94	0.27	63,63,63,63	0
54	MG	1A	3076	1/1	0.94	0.15	36,36,36,36	0
54	MG	2A	3085	1/1	0.94	0.14	47,47,47,47	0
54	MG	2A	3283	1/1	0.94	0.11	43,43,43,43	0
54	MG	2A	3506	1/1	0.94	0.11	67,67,67,67	0
54	MG	2A	3086	1/1	0.94	0.13	47,47,47,47	0
54	MG	1A	3166	1/1	0.94	0.19	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3404	1/1	0.94	0.22	36,36,36,36	0
54	MG	2A	3089	1/1	0.94	0.20	69,69,69,69	0
54	MG	2D	303	1/1	0.94	0.41	49,49,49,49	0
54	MG	1A	3919	1/1	0.94	0.24	61,61,61,61	0
54	MG	1A	3332	1/1	0.94	0.22	38,38,38,38	0
54	MG	2A	3298	1/1	0.94	0.12	37,37,37,37	0
54	MG	2A	3515	1/1	0.94	0.09	54,54,54,54	0
54	MG	1A	3273	1/1	0.94	0.28	50,50,50,50	0
54	MG	1A	3169	1/1	0.94	0.12	64,64,64,64	0
54	MG	1A	3221	1/1	0.94	0.21	60,60,60,60	0
54	MG	1a	1647	1/1	0.94	0.14	50,50,50,50	0
54	MG	2A	3305	1/1	0.94	0.15	68,68,68,68	0
54	MG	1a	1648	1/1	0.94	0.14	52,52,52,52	0
54	MG	2A	3102	1/1	0.94	0.15	71,71,71,71	0
54	MG	1A	3924	1/1	0.94	0.12	67,67,67,67	0
54	MG	1A	3226	1/1	0.94	0.17	49,49,49,49	0
54	MG	1A	3093	1/1	0.94	0.10	57,57,57,57	0
54	MG	1a	1802	1/1	0.94	0.10	67,67,67,67	0
54	MG	2A	3317	1/1	0.94	0.19	67,67,67,67	0
54	MG	1A	3347	1/1	0.94	0.14	40,40,40,40	0
54	MG	2A	3321	1/1	0.94	0.18	56,56,56,56	0
54	MG	1a	1653	1/1	0.94	0.18	63,63,63,63	0
54	MG	1a	1654	1/1	0.94	0.09	66,66,66,66	0
54	MG	2A	3324	1/1	0.94	0.10	64,64,64,64	0
54	MG	1a	1806	1/1	0.94	0.08	73,73,73,73	0
54	MG	1A	3739	1/1	0.94	0.30	55,55,55,55	0
54	MG	2W	201	1/1	0.94	0.46	64,64,64,64	0
54	MG	1E	306	1/1	0.94	0.21	59,59,59,59	0
54	MG	1A	3477	1/1	0.94	0.18	31,31,31,31	0
54	MG	23	101	1/1	0.94	0.14	56,56,56,56	0
54	MG	2A	3548	1/1	0.94	0.14	56,56,56,56	0
54	MG	1A	3416	1/1	0.94	0.23	34,34,34,34	0
54	MG	1A	3417	1/1	0.94	0.18	35,35,35,35	0
54	MG	2A	3125	1/1	0.94	0.13	43,43,43,43	0
54	MG	2A	3554	1/1	0.94	0.14	41,41,41,41	0
54	MG	2A	3126	1/1	0.94	0.17	57,57,57,57	0
54	MG	2A	3556	1/1	0.94	0.16	37,37,37,37	0
54	MG	2A	3127	1/1	0.94	0.19	36,36,36,36	0
54	MG	1A	3828	1/1	0.94	0.16	46,46,46,46	0
54	MG	2A	3560	1/1	0.94	0.11	61,61,61,61	0
54	MG	1A	3228	1/1	0.94	0.33	52,52,52,52	0
54	MG	2a	3015	1/1	0.94	0.12	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1665	1/1	0.94	0.31	60,60,60,60	0
54	MG	1a	1816	1/1	0.94	0.10	75,75,75,75	0
54	MG	1A	3035	1/1	0.94	0.20	59,59,59,59	0
54	MG	2A	3134	1/1	0.94	0.16	71,71,71,71	0
54	MG	2A	3135	1/1	0.94	0.16	53,53,53,53	0
54	MG	1A	3056	1/1	0.94	0.17	53,53,53,53	0
54	MG	1A	3832	1/1	0.94	0.22	44,44,44,44	0
54	MG	1A	3357	1/1	0.94	0.17	40,40,40,40	0
54	MG	1A	3081	1/1	0.94	0.15	54,54,54,54	0
54	MG	1A	3836	1/1	0.94	0.11	47,47,47,47	0
54	MG	1A	3491	1/1	0.94	0.13	67,67,67,67	0
54	MG	1F	317	1/1	0.94	0.21	55,55,55,55	0
54	MG	2A	3578	1/1	0.94	0.15	64,64,64,64	0
54	MG	1a	1674	1/1	0.94	0.12	62,62,62,62	0
54	MG	2a	3036	1/1	0.94	0.11	74,74,74,74	0
54	MG	1a	1829	1/1	0.94	0.08	63,63,63,63	0
54	MG	2A	3582	1/1	0.94	0.10	49,49,49,49	0
54	MG	1A	3950	1/1	0.94	0.16	24,24,24,24	0
54	MG	1A	3840	1/1	0.94	0.11	61,61,61,61	0
54	MG	1H	202	1/1	0.94	0.26	54,54,54,54	0
54	MG	1N	202	1/1	0.94	0.14	48,48,48,48	0
54	MG	2A	3152	1/1	0.94	0.24	55,55,55,55	0
54	MG	1N	203	1/1	0.94	0.16	62,62,62,62	0
54	MG	2A	3592	1/1	0.94	0.18	58,58,58,58	0
54	MG	2a	3050	1/1	0.94	0.15	77,77,77,77	0
54	MG	1A	3750	1/1	0.94	0.12	47,47,47,47	0
54	MG	1A	3843	1/1	0.94	0.12	41,41,41,41	0
54	MG	1a	1839	1/1	0.94	0.17	55,55,55,55	0
54	MG	1A	3360	1/1	0.94	0.17	33,33,33,33	0
54	MG	1A	3059	1/1	0.94	0.18	42,42,42,42	0
54	MG	1A	3143	1/1	0.94	0.11	44,44,44,44	0
54	MG	2A	3602	1/1	0.94	0.08	44,44,44,44	0
54	MG	1A	3364	1/1	0.94	0.11	33,33,33,33	0
54	MG	1R	202	1/1	0.94	0.16	43,43,43,43	0
54	MG	2a	3060	1/1	0.94	0.09	62,62,62,62	0
54	MG	1A	3849	1/1	0.94	0.20	44,44,44,44	0
54	MG	1A	3756	1/1	0.94	0.08	49,49,49,49	0
54	MG	2A	3607	1/1	0.94	0.15	44,44,44,44	0
54	MG	2A	3386	1/1	0.94	0.22	58,58,58,58	0
54	MG	1A	3502	1/1	0.94	0.22	27,27,27,27	0
54	MG	1A	3365	1/1	0.94	0.15	42,42,42,42	0
54	MG	2A	3389	1/1	0.94	0.19	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3240	1/1	0.94	0.12	52,52,52,52	0
54	MG	1A	3241	1/1	0.94	0.18	36,36,36,36	0
54	MG	2a	3072	1/1	0.94	0.12	70,70,70,70	0
54	MG	2A	3392	1/1	0.94	0.10	54,54,54,54	0
54	MG	1A	3761	1/1	0.94	0.12	66,66,66,66	0
54	MG	1A	3008	1/1	0.94	0.17	45,45,45,45	0
54	MG	2A	3395	1/1	0.94	0.06	56,56,56,56	0
54	MG	1A	3968	1/1	0.94	0.16	48,48,48,48	0
54	MG	1V	204	1/1	0.94	0.33	69,69,69,69	0
54	MG	2a	3081	1/1	0.94	0.28	63,63,63,63	0
54	MG	1A	3862	1/1	0.94	0.10	55,55,55,55	0
54	MG	1A	3863	1/1	0.94	0.19	54,54,54,54	0
54	MG	1a	1704	1/1	0.94	0.16	72,72,72,72	0
54	MG	1W	201	1/1	0.94	0.39	60,60,60,60	0
54	MG	1A	3764	1/1	0.94	0.10	61,61,61,61	0
54	MG	2A	3181	1/1	0.94	0.11	63,63,63,63	0
54	MG	1A	3509	1/1	0.94	0.20	24,24,24,24	0
54	MG	1A	3595	1/1	0.94	0.32	46,46,46,46	0
54	MG	1A	3105	1/1	0.94	0.31	43,43,43,43	0
54	MG	2A	3186	1/1	0.94	0.13	65,65,65,65	0
54	MG	2a	3099	1/1	0.94	0.13	53,53,53,53	0
54	MG	2A	3187	1/1	0.94	0.18	50,50,50,50	0
54	MG	2A	3636	1/1	0.94	0.10	84,84,84,84	0
54	MG	2a	3102	1/1	0.94	0.14	69,69,69,69	0
54	MG	1A	3868	1/1	0.94	0.09	63,63,63,63	0
54	MG	1a	1714	1/1	0.94	0.10	65,65,65,65	0
54	MG	2A	3639	1/1	0.94	0.15	70,70,70,70	0
54	MG	10	101	1/1	0.94	0.17	44,44,44,44	0
54	MG	2a	3107	1/1	0.94	0.11	78,78,78,78	0
54	MG	2a	3108	1/1	0.94	0.14	68,68,68,68	0
54	MG	1A	3186	1/1	0.94	0.18	68,68,68,68	0
54	MG	2A	3416	1/1	0.94	0.19	68,68,68,68	0
54	MG	1A	3514	1/1	0.94	0.15	33,33,33,33	0
54	MG	2A	3644	1/1	0.94	0.19	46,46,46,46	0
54	MG	1a	1721	1/1	0.94	0.20	45,45,45,45	0
54	MG	1n	101	1/1	0.94	0.14	80,80,80,80	0
54	MG	1n	103	1/1	0.94	0.08	57,57,57,57	0
54	MG	1A	3303	1/1	0.94	0.13	58,58,58,58	0
54	MG	2a	3117	1/1	0.94	0.09	75,75,75,75	0
54	MG	1A	3253	1/1	0.94	0.24	60,60,60,60	0
54	MG	2A	3425	1/1	0.94	0.15	65,65,65,65	0
54	MG	2a	3121	1/1	0.94	0.25	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3050	1/1	0.94	0.35	38,38,38,38	0
54	MG	2A	3428	1/1	0.94	0.04	64,64,64,64	0
54	MG	1a	1726	1/1	0.94	0.05	73,73,73,73	0
54	MG	11	101	1/1	0.94	0.20	49,49,49,49	0
54	MG	1A	3519	1/1	0.94	0.08	55,55,55,55	0
54	MG	1A	3983	1/1	0.94	0.27	41,41,41,41	0
54	MG	13	102	1/1	0.94	0.10	73,73,73,73	0
54	MG	1a	1732	1/1	0.94	0.16	38,38,38,38	0
54	MG	1a	1734	1/1	0.94	0.15	45,45,45,45	0
54	MG	1A	3878	1/1	0.94	0.14	58,58,58,58	0
54	MG	2a	3134	1/1	0.94	0.16	54,54,54,54	0
54	MG	1A	3378	1/1	0.94	0.15	29,29,29,29	0
54	MG	2A	3214	1/1	0.94	0.33	53,53,53,53	0
54	MG	2A	3440	1/1	0.94	0.13	62,62,62,62	0
54	MG	2A	3215	1/1	0.94	0.27	64,64,64,64	0
54	MG	2A	3010	1/1	0.94	0.11	67,67,67,67	0
54	MG	1A	3987	1/1	0.94	0.21	54,54,54,54	0
54	MG	2A	3679	1/1	0.94	0.12	76,76,76,76	0
54	MG	1A	3109	1/1	0.94	0.11	39,39,39,39	0
54	MG	2a	3145	1/1	0.94	0.15	80,80,80,80	0
54	MG	2a	3146	1/1	0.94	0.11	69,69,69,69	0
54	MG	2A	3220	1/1	0.94	0.12	68,68,68,68	0
54	MG	1A	3882	1/1	0.94	0.07	43,43,43,43	0
54	MG	2A	3021	1/1	0.94	0.14	40,40,40,40	0
54	MG	17	104	1/1	0.94	0.24	63,63,63,63	0
54	MG	1A	3992	1/1	0.94	0.12	56,56,56,56	0
54	MG	2a	3156	1/1	0.94	0.17	63,63,63,63	0
54	MG	18	101	1/1	0.94	0.13	43,43,43,43	0
54	MG	19	102	1/1	0.94	0.15	58,58,58,58	0
54	MG	1A	3687	1/1	0.94	0.11	46,46,46,46	0
54	MG	1A	3381	1/1	0.94	0.18	39,39,39,39	0
54	MG	1A	3783	1/1	0.94	0.17	37,37,37,37	0
54	MG	1A	3784	1/1	0.94	0.07	57,57,57,57	0
54	MG	1a	1606	1/1	0.94	0.11	55,55,55,55	0
54	MG	2a	3169	1/1	0.94	0.25	70,70,70,70	0
54	MG	2a	3170	1/1	0.94	0.18	77,77,77,77	0
54	MG	2A	3241	1/1	0.94	0.29	57,57,57,57	0
54	MG	1A	3523	1/1	0.94	0.11	58,58,58,58	0
54	MG	1A	3690	1/1	0.94	0.09	38,38,38,38	0
54	MG	1A	3524	1/1	0.94	0.16	58,58,58,58	0
54	MG	2a	3175	1/1	0.94	0.10	69,69,69,69	0
54	MG	1A	3310	1/1	0.94	0.13	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3384	1/1	0.94	0.24	31,31,31,31	0
54	MG	1a	1614	1/1	0.94	0.09	62,62,62,62	0
54	MG	1A	3051	1/1	0.94	0.27	38,38,38,38	0
54	MG	1B	209	1/1	0.94	0.16	43,43,43,43	0
54	MG	1A	3312	1/1	0.94	0.16	54,54,54,54	0
54	MG	1a	1618	1/1	0.94	0.10	59,59,59,59	0
54	MG	2A	3712	1/1	0.94	0.21	62,62,62,62	0
54	MG	1A	3261	1/1	0.94	0.26	37,37,37,37	0
54	MG	2A	3255	1/1	0.94	0.09	71,71,71,71	0
55	A1AE1	2A	3726	76/76	0.94	0.23	38,48,54,60	0
54	MG	2A	3715	1/1	0.94	0.11	63,63,63,63	0
54	MG	1B	212	1/1	0.94	0.14	67,67,67,67	0
54	MG	1A	3390	1/1	0.94	0.15	27,27,27,27	0
54	MG	2A	3718	1/1	0.94	0.20	76,76,76,76	0
57	MPD	18	103	8/8	0.94	0.22	36,45,46,51	0
54	MG	1a	1771	1/1	0.94	0.18	70,70,70,70	0
54	MG	1A	3619	1/1	0.94	0.15	59,59,59,59	0
54	MG	1A	3391	1/1	0.94	0.17	32,32,32,32	0
54	MG	1A	3153	1/1	0.94	0.16	42,42,42,42	0
54	MG	2A	3263	1/1	0.94	0.20	58,58,58,58	0
54	MG	1A	3139	1/1	0.95	0.12	57,57,57,57	0
54	MG	1F	310	1/1	0.95	0.20	35,35,35,35	0
54	MG	1A	3462	1/1	0.95	0.22	49,49,49,49	0
54	MG	1a	1764	1/1	0.95	0.13	75,75,75,75	0
54	MG	2A	3018	1/1	0.95	0.36	46,46,46,46	0
54	MG	1A	3678	1/1	0.95	0.12	35,35,35,35	0
54	MG	2A	3382	1/1	0.95	0.15	50,50,50,50	0
54	MG	1A	3359	1/1	0.95	0.15	35,35,35,35	0
54	MG	1A	3860	1/1	0.95	0.07	46,46,46,46	0
54	MG	2V	202	1/1	0.95	0.42	49,49,49,49	0
54	MG	1F	315	1/1	0.95	0.12	66,66,66,66	0
54	MG	1A	3080	1/1	0.95	0.34	44,44,44,44	0
54	MG	1A	3039	1/1	0.95	0.16	47,47,47,47	0
54	MG	2A	3199	1/1	0.95	0.43	48,48,48,48	0
54	MG	20	103	1/1	0.95	0.16	58,58,58,58	0
54	MG	1G	201	1/1	0.95	0.08	64,64,64,64	0
54	MG	25	101	1/1	0.95	0.18	75,75,75,75	0
54	MG	27	101	1/1	0.95	0.15	46,46,46,46	0
54	MG	27	102	1/1	0.95	0.19	47,47,47,47	0
54	MG	1A	3684	1/1	0.95	0.09	42,42,42,42	0
54	MG	2A	3580	1/1	0.95	0.17	61,61,61,61	0
54	MG	1A	3604	1/1	0.95	0.21	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3307	1/1	0.95	0.21	62,62,62,62	0
54	MG	1N	201	1/1	0.95	0.22	43,43,43,43	0
54	MG	1A	3168	1/1	0.95	0.38	42,42,42,42	0
54	MG	2A	3206	1/1	0.95	0.23	43,43,43,43	0
54	MG	1A	3536	1/1	0.95	0.23	63,63,63,63	0
54	MG	2A	3208	1/1	0.95	0.45	46,46,46,46	0
54	MG	2a	3011	1/1	0.95	0.23	72,72,72,72	0
54	MG	2A	3209	1/1	0.95	0.15	68,68,68,68	0
54	MG	2a	3013	1/1	0.95	0.12	56,56,56,56	0
54	MG	2A	3042	1/1	0.95	0.08	58,58,58,58	0
54	MG	1A	3779	1/1	0.95	0.16	65,65,65,65	0
54	MG	1A	3537	1/1	0.95	0.22	61,61,61,61	0
54	MG	1A	3871	1/1	0.95	0.11	19,19,19,19	0
54	MG	1a	1658	1/1	0.95	0.18	67,67,67,67	0
54	MG	2A	3598	1/1	0.95	0.13	40,40,40,40	0
54	MG	1A	3193	1/1	0.95	0.66	51,51,51,51	0
54	MG	1A	3691	1/1	0.95	0.12	35,35,35,35	0
54	MG	1Q	203	1/1	0.95	0.15	46,46,46,46	0
54	MG	1A	3972	1/1	0.95	0.12	68,68,68,68	0
54	MG	1A	3117	1/1	0.95	0.19	46,46,46,46	0
54	MG	2A	3222	1/1	0.95	0.18	43,43,43,43	0
54	MG	1A	3195	1/1	0.95	0.34	44,44,44,44	0
54	MG	2a	3028	1/1	0.95	0.17	72,72,72,72	0
54	MG	2a	3029	1/1	0.95	0.24	70,70,70,70	0
54	MG	2a	3030	1/1	0.95	0.21	66,66,66,66	0
54	MG	1A	3695	1/1	0.95	0.16	47,47,47,47	0
54	MG	2A	3226	1/1	0.95	0.20	60,60,60,60	0
54	MG	1a	1792	1/1	0.95	0.04	67,67,67,67	0
54	MG	2A	3418	1/1	0.95	0.18	40,40,40,40	0
54	MG	2a	3037	1/1	0.95	0.20	80,80,80,80	0
54	MG	2A	3229	1/1	0.95	0.33	61,61,61,61	0
54	MG	1A	3278	1/1	0.95	0.14	54,54,54,54	0
54	MG	2A	3060	1/1	0.95	0.23	54,54,54,54	0
54	MG	2A	3614	1/1	0.95	0.08	42,42,42,42	0
54	MG	1A	3789	1/1	0.95	0.12	46,46,46,46	0
54	MG	2a	3044	1/1	0.95	0.13	58,58,58,58	0
54	MG	2A	3616	1/1	0.95	0.22	74,74,74,74	0
54	MG	2A	3233	1/1	0.95	0.20	45,45,45,45	0
54	MG	1A	3314	1/1	0.95	0.20	32,32,32,32	0
54	MG	1A	3791	1/1	0.95	0.23	30,30,30,30	0
54	MG	2A	3071	1/1	0.95	0.35	45,45,45,45	0
54	MG	1A	3615	1/1	0.95	0.14	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3239	1/1	0.95	0.25	55,55,55,55	0
54	MG	1A	3279	1/1	0.95	0.18	46,46,46,46	0
54	MG	1U	201	1/1	0.95	0.31	59,59,59,59	0
54	MG	1V	202	1/1	0.95	0.24	36,36,36,36	0
54	MG	2A	3078	1/1	0.95	0.21	53,53,53,53	0
54	MG	1A	3197	1/1	0.95	0.40	49,49,49,49	0
54	MG	2A	3080	1/1	0.95	0.10	71,71,71,71	0
54	MG	2A	3081	1/1	0.95	0.22	66,66,66,66	0
54	MG	1A	3424	1/1	0.95	0.19	66,66,66,66	0
54	MG	2A	3439	1/1	0.95	0.24	62,62,62,62	0
54	MG	1a	1807	1/1	0.95	0.14	88,88,88,88	0
54	MG	1A	3373	1/1	0.95	0.19	60,60,60,60	0
54	MG	2A	3442	1/1	0.95	0.18	66,66,66,66	0
54	MG	1a	1678	1/1	0.95	0.08	74,74,74,74	0
54	MG	1A	3985	1/1	0.95	0.16	68,68,68,68	0
54	MG	1A	3801	1/1	0.95	0.09	48,48,48,48	0
54	MG	1A	3282	1/1	0.95	0.21	38,38,38,38	0
54	MG	1A	3074	1/1	0.95	0.18	42,42,42,42	0
54	MG	2A	3091	1/1	0.95	0.12	49,49,49,49	0
54	MG	1A	3893	1/1	0.95	0.11	58,58,58,58	0
54	MG	2A	3645	1/1	0.95	0.12	48,48,48,48	0
54	MG	2a	3076	1/1	0.95	0.20	51,51,51,51	0
54	MG	1W	205	1/1	0.95	0.24	52,52,52,52	0
54	MG	1A	3551	1/1	0.95	0.13	66,66,66,66	0
54	MG	1A	3993	1/1	0.95	0.13	66,66,66,66	0
54	MG	1A	3712	1/1	0.95	0.18	40,40,40,40	0
54	MG	1A	3481	1/1	0.95	0.14	34,34,34,34	0
54	MG	10	104	1/1	0.95	0.11	56,56,56,56	0
54	MG	1A	3377	1/1	0.95	0.21	25,25,25,25	0
54	MG	1A	3554	1/1	0.95	0.13	49,49,49,49	0
54	MG	1B	202	1/1	0.95	0.24	62,62,62,62	0
54	MG	2A	3107	1/1	0.95	0.10	42,42,42,42	0
54	MG	2A	3660	1/1	0.95	0.11	51,51,51,51	0
54	MG	2a	3091	1/1	0.95	0.21	62,62,62,62	0
54	MG	2a	3092	1/1	0.95	0.20	59,59,59,59	0
54	MG	2A	3465	1/1	0.95	0.14	39,39,39,39	0
54	MG	1A	3719	1/1	0.95	0.16	57,57,57,57	0
54	MG	1A	3120	1/1	0.95	0.17	38,38,38,38	0
54	MG	1a	1827	1/1	0.95	0.09	81,81,81,81	0
54	MG	2A	3665	1/1	0.95	0.15	70,70,70,70	0
54	MG	11	102	1/1	0.95	0.28	55,55,55,55	0
54	MG	11	103	1/1	0.95	0.13	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3471	1/1	0.95	0.09	51,51,51,51	0
54	MG	1A	3486	1/1	0.95	0.17	24,24,24,24	0
54	MG	1A	3052	1/1	0.95	0.23	50,50,50,50	0
54	MG	1a	1833	1/1	0.95	0.15	77,77,77,77	0
54	MG	2A	3287	1/1	0.95	0.15	41,41,41,41	0
54	MG	1A	3030	1/1	0.95	0.13	50,50,50,50	0
54	MG	1A	3561	1/1	0.95	0.19	29,29,29,29	0
54	MG	1A	3179	1/1	0.95	0.23	73,73,73,73	0
54	MG	1A	3291	1/1	0.95	0.17	43,43,43,43	0
54	MG	2A	3483	1/1	0.95	0.14	69,69,69,69	0
54	MG	1a	1838	1/1	0.95	0.14	49,49,49,49	0
54	MG	2A	3686	1/1	0.95	0.12	63,63,63,63	0
54	MG	1A	3734	1/1	0.95	0.11	65,65,65,65	0
54	MG	15	109	1/1	0.95	0.12	53,53,53,53	0
54	MG	1A	3492	1/1	0.95	0.14	43,43,43,43	0
54	MG	2A	3488	1/1	0.95	0.07	63,63,63,63	0
54	MG	1A	3437	1/1	0.95	0.17	65,65,65,65	0
54	MG	1a	1843	1/1	0.95	0.11	61,61,61,61	0
54	MG	2a	3120	1/1	0.95	0.17	71,71,71,71	0
54	MG	2A	3491	1/1	0.95	0.14	64,64,64,64	0
54	MG	1a	1712	1/1	0.95	0.15	72,72,72,72	0
54	MG	1A	3915	1/1	0.95	0.13	34,34,34,34	0
54	MG	2A	3309	1/1	0.95	0.24	65,65,65,65	0
54	MG	1A	3642	1/1	0.95	0.09	67,67,67,67	0
54	MG	2A	3136	1/1	0.95	0.14	40,40,40,40	0
54	MG	1a	1718	1/1	0.95	0.14	78,78,78,78	0
54	MG	18	102	1/1	0.95	0.25	39,39,39,39	0
54	MG	1A	3130	1/1	0.95	0.18	45,45,45,45	0
54	MG	1a	1601	1/1	0.95	0.12	74,74,74,74	0
54	MG	2A	3318	1/1	0.95	0.15	50,50,50,50	0
54	MG	2A	3319	1/1	0.95	0.18	48,48,48,48	0
54	MG	1A	3496	1/1	0.95	0.19	70,70,70,70	0
54	MG	2A	3505	1/1	0.95	0.15	78,78,78,78	0
54	MG	1A	3072	1/1	0.95	0.16	38,38,38,38	0
54	MG	1A	3500	1/1	0.95	0.21	28,28,28,28	0
54	MG	1A	3340	1/1	0.95	0.11	57,57,57,57	0
54	MG	1A	3575	1/1	0.95	0.12	57,57,57,57	0
54	MG	1A	3388	1/1	0.95	0.20	23,23,23,23	0
54	MG	1a	1860	1/1	0.95	0.13	71,71,71,71	0
54	MG	1a	1861	1/1	0.95	0.07	78,78,78,78	0
54	MG	2A	3330	1/1	0.95	0.17	37,37,37,37	0
54	MG	1a	1729	1/1	0.95	0.10	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3150	1/1	0.95	0.14	73,73,73,73	0
54	MG	1A	3342	1/1	0.95	0.13	46,46,46,46	0
54	MG	1A	3215	1/1	0.95	0.57	43,43,43,43	0
54	MG	2A	3336	1/1	0.95	0.20	64,64,64,64	0
54	MG	2a	3154	1/1	0.95	0.10	85,85,85,85	0
54	MG	2A	3520	1/1	0.95	0.38	53,53,53,53	0
54	MG	1B	229	1/1	0.95	0.19	70,70,70,70	0
54	MG	1A	3930	1/1	0.95	0.11	44,44,44,44	0
54	MG	1A	3345	1/1	0.95	0.17	27,27,27,27	0
54	MG	1e	202	1/1	0.95	0.13	68,68,68,68	0
54	MG	1A	3935	1/1	0.95	0.12	54,54,54,54	0
54	MG	2a	3162	1/1	0.95	0.13	77,77,77,77	0
54	MG	1g	201	1/1	0.95	0.17	73,73,73,73	0
54	MG	1A	3218	1/1	0.95	0.14	40,40,40,40	0
54	MG	1A	3397	1/1	0.95	0.20	29,29,29,29	0
54	MG	2A	3532	1/1	0.95	0.14	60,60,60,60	0
54	MG	1A	3511	1/1	0.95	0.19	24,24,24,24	0
54	MG	1A	3753	1/1	0.95	0.24	37,37,37,37	0
54	MG	2A	3536	1/1	0.95	0.07	58,58,58,58	0
54	MG	1A	3453	1/1	0.95	0.14	40,40,40,40	0
54	MG	1A	3348	1/1	0.95	0.21	38,38,38,38	0
54	MG	1A	3258	1/1	0.95	0.12	37,37,37,37	0
54	MG	1A	3588	1/1	0.95	0.10	50,50,50,50	0
54	MG	1o	101	1/1	0.95	0.22	61,61,61,61	0
54	MG	1a	1626	1/1	0.95	0.14	52,52,52,52	0
54	MG	2a	3180	1/1	0.95	0.09	65,65,65,65	0
54	MG	1A	3259	1/1	0.95	0.20	67,67,67,67	0
54	MG	1A	3220	1/1	0.95	0.24	65,65,65,65	0
54	MG	2D	306	1/1	0.95	0.14	42,42,42,42	0
54	MG	1A	3099	1/1	0.95	0.16	34,34,34,34	0
54	MG	2A	3549	1/1	0.95	0.16	37,37,37,37	0
54	MG	1A	3949	1/1	0.95	0.09	48,48,48,48	0
54	MG	2A	3367	1/1	0.95	0.13	70,70,70,70	0
54	MG	1a	1753	1/1	0.95	0.10	70,70,70,70	0
54	MG	2A	3553	1/1	0.95	0.07	58,58,58,58	0
54	MG	1A	3459	1/1	0.95	0.15	34,34,34,34	0
54	MG	1A	3405	1/1	0.95	0.13	59,59,59,59	0
54	MG	1a	1756	1/1	0.95	0.15	71,71,71,71	0
54	MG	2F	301	1/1	0.95	0.46	46,46,46,46	0
54	MG	1a	1757	1/1	0.95	0.10	65,65,65,65	0
54	MG	1A	3673	1/1	0.95	0.09	56,56,56,56	0
54	MG	1a	1636	1/1	0.95	0.24	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2N	201	1/1	0.95	0.13	77,77,77,77	0
54	MG	2O	3701	1/1	0.95	0.09	64,64,64,64	0
54	MG	2W	202	1/1	0.96	0.21	63,63,63,63	0
54	MG	1A	3601	1/1	0.96	0.15	38,38,38,38	0
54	MG	1A	3776	1/1	0.96	0.21	39,39,39,39	0
54	MG	2A	3070	1/1	0.96	0.21	63,63,63,63	0
54	MG	1a	1800	1/1	0.96	0.11	70,70,70,70	0
54	MG	2A	3595	1/1	0.96	0.29	66,66,66,66	0
54	MG	2A	3413	1/1	0.96	0.30	58,58,58,58	0
54	MG	1a	1801	1/1	0.96	0.18	71,71,71,71	0
54	MG	27	103	1/1	0.96	0.17	43,43,43,43	0
54	MG	1A	3229	1/1	0.96	0.40	43,43,43,43	0
54	MG	2a	3001	1/1	0.96	0.24	49,49,49,49	0
54	MG	1U	203	1/1	0.96	0.16	32,32,32,32	0
54	MG	1V	201	1/1	0.96	0.34	36,36,36,36	0
54	MG	2A	3236	1/1	0.96	0.17	52,52,52,52	0
54	MG	1A	3874	1/1	0.96	0.08	58,58,58,58	0
54	MG	1A	3230	1/1	0.96	0.11	36,36,36,36	0
54	MG	1A	3531	1/1	0.96	0.10	41,41,41,41	0
54	MG	1A	3344	1/1	0.96	0.17	40,40,40,40	0
54	MG	1A	3534	1/1	0.96	0.21	53,53,53,53	0
54	MG	2A	3424	1/1	0.96	0.14	35,35,35,35	0
54	MG	1A	3535	1/1	0.96	0.24	49,49,49,49	0
54	MG	1A	3016	1/1	0.96	0.23	36,36,36,36	0
54	MG	1A	3083	1/1	0.96	0.13	40,40,40,40	0
54	MG	1A	3062	1/1	0.96	0.27	54,54,54,54	0
54	MG	1A	3288	1/1	0.96	0.16	37,37,37,37	0
54	MG	1a	1685	1/1	0.96	0.19	49,49,49,49	0
54	MG	1A	3989	1/1	0.96	0.14	56,56,56,56	0
54	MG	1Y	201	1/1	0.96	0.17	68,68,68,68	0
54	MG	2A	3093	1/1	0.96	0.12	75,75,75,75	0
54	MG	1a	1688	1/1	0.96	0.21	46,46,46,46	0
54	MG	1A	3990	1/1	0.96	0.11	50,50,50,50	0
54	MG	1A	3694	1/1	0.96	0.33	38,38,38,38	0
54	MG	1A	3149	1/1	0.96	0.11	35,35,35,35	0
54	MG	1A	3188	1/1	0.96	0.15	51,51,51,51	0
54	MG	1A	3792	1/1	0.96	0.36	44,44,44,44	0
54	MG	1A	3697	1/1	0.96	0.20	30,30,30,30	0
54	MG	1A	3237	1/1	0.96	0.16	56,56,56,56	0
54	MG	2A	3104	1/1	0.96	0.40	54,54,54,54	0
54	MG	1a	1697	1/1	0.96	0.18	69,69,69,69	0
54	MG	2a	3032	1/1	0.96	0.18	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3629	1/1	0.96	0.05	61,61,61,61	0
54	MG	1A	3796	1/1	0.96	0.16	17,17,17,17	0
54	MG	2A	3631	1/1	0.96	0.07	55,55,55,55	0
54	MG	1A	3065	1/1	0.96	0.29	38,38,38,38	0
54	MG	1A	3895	1/1	0.96	0.07	35,35,35,35	0
54	MG	2A	3267	1/1	0.96	0.15	60,60,60,60	0
54	MG	1A	3067	1/1	0.96	0.14	39,39,39,39	0
54	MG	1A	3244	1/1	0.96	0.12	62,62,62,62	0
54	MG	2A	3271	1/1	0.96	0.23	35,35,35,35	0
54	MG	11	105	1/1	0.96	0.08	37,37,37,37	0
54	MG	2A	3273	1/1	0.96	0.29	56,56,56,56	0
54	MG	2A	3457	1/1	0.96	0.12	64,64,64,64	0
54	MG	2A	3114	1/1	0.96	0.23	48,48,48,48	0
54	MG	1A	3620	1/1	0.96	0.23	52,52,52,52	0
54	MG	1A	3068	1/1	0.96	0.40	50,50,50,50	0
54	MG	1A	3040	1/1	0.96	0.19	38,38,38,38	0
54	MG	15	104	1/1	0.96	0.28	39,39,39,39	0
54	MG	15	105	1/1	0.96	0.23	46,46,46,46	0
54	MG	2A	3648	1/1	0.96	0.26	64,64,64,64	0
54	MG	2A	3122	1/1	0.96	0.07	42,42,42,42	0
54	MG	1A	3478	1/1	0.96	0.17	26,26,26,26	0
54	MG	1a	1710	1/1	0.96	0.15	63,63,63,63	0
54	MG	1A	3251	1/1	0.96	0.20	49,49,49,49	0
54	MG	1A	3018	1/1	0.96	0.14	30,30,30,30	0
54	MG	2A	3655	1/1	0.96	0.25	65,65,65,65	0
54	MG	1A	3714	1/1	0.96	0.14	51,51,51,51	0
54	MG	1a	1715	1/1	0.96	0.20	68,68,68,68	0
54	MG	2a	3063	1/1	0.96	0.12	77,77,77,77	0
54	MG	1A	3905	1/1	0.96	0.13	68,68,68,68	0
54	MG	2A	3296	1/1	0.96	0.11	60,60,60,60	0
54	MG	2A	3297	1/1	0.96	0.09	43,43,43,43	0
54	MG	1A	3020	1/1	0.96	0.25	44,44,44,44	0
54	MG	1A	3158	1/1	0.96	0.62	57,57,57,57	0
54	MG	1A	3005	1/1	0.96	0.19	25,25,25,25	0
54	MG	1B	217	1/1	0.96	0.17	47,47,47,47	0
54	MG	1a	1852	1/1	0.96	0.18	55,55,55,55	0
54	MG	2A	3304	1/1	0.96	0.09	66,66,66,66	0
54	MG	2A	3667	1/1	0.96	0.14	63,63,63,63	0
54	MG	2a	3075	1/1	0.96	0.27	68,68,68,68	0
54	MG	1A	3122	1/1	0.96	0.20	44,44,44,44	0
54	MG	2A	3306	1/1	0.96	0.19	40,40,40,40	0
54	MG	1A	3206	1/1	0.96	0.13	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3671	1/1	0.96	0.14	70,70,70,70	0
54	MG	1A	3722	1/1	0.96	0.28	59,59,59,59	0
54	MG	1A	3559	1/1	0.96	0.07	38,38,38,38	0
54	MG	1A	3916	1/1	0.96	0.15	25,25,25,25	0
54	MG	2a	3083	1/1	0.96	0.20	57,57,57,57	0
54	MG	2A	3675	1/1	0.96	0.13	70,70,70,70	0
54	MG	2a	3085	1/1	0.96	0.22	67,67,67,67	0
54	MG	2A	3677	1/1	0.96	0.20	62,62,62,62	0
54	MG	1A	3918	1/1	0.96	0.10	50,50,50,50	0
54	MG	2A	3313	1/1	0.96	0.08	57,57,57,57	0
54	MG	2A	3680	1/1	0.96	0.09	66,66,66,66	0
54	MG	1A	3430	1/1	0.96	0.13	45,45,45,45	0
54	MG	1A	3725	1/1	0.96	0.08	29,29,29,29	0
54	MG	2A	3316	1/1	0.96	0.12	58,58,58,58	0
54	MG	2A	3495	1/1	0.96	0.18	40,40,40,40	0
54	MG	2A	3685	1/1	0.96	0.12	65,65,65,65	0
54	MG	1a	1862	1/1	0.96	0.12	72,72,72,72	0
54	MG	1A	3819	1/1	0.96	0.15	41,41,41,41	0
54	MG	1A	3726	1/1	0.96	0.26	35,35,35,35	0
54	MG	1a	1866	1/1	0.96	0.12	61,61,61,61	0
54	MG	1A	3123	1/1	0.96	0.25	40,40,40,40	0
54	MG	1d	302	1/1	0.96	0.15	73,73,73,73	0
54	MG	1A	3024	1/1	0.96	0.20	24,24,24,24	0
54	MG	1A	3374	1/1	0.96	0.18	40,40,40,40	0
54	MG	1D	307	1/1	0.96	0.14	42,42,42,42	0
54	MG	1A	3128	1/1	0.96	0.16	52,52,52,52	0
54	MG	2A	3327	1/1	0.96	0.19	39,39,39,39	0
54	MG	2A	3697	1/1	0.96	0.09	69,69,69,69	0
54	MG	1D	311	1/1	0.96	0.31	45,45,45,45	0
54	MG	1a	1741	1/1	0.96	0.16	40,40,40,40	0
54	MG	1A	3170	1/1	0.96	0.17	51,51,51,51	0
54	MG	1A	3568	1/1	0.96	0.20	62,62,62,62	0
54	MG	1A	3265	1/1	0.96	0.28	53,53,53,53	0
54	MG	1A	3213	1/1	0.96	0.29	47,47,47,47	0
54	MG	1l	201	1/1	0.96	0.21	66,66,66,66	0
54	MG	1A	3934	1/1	0.96	0.14	39,39,39,39	0
54	MG	1a	1624	1/1	0.96	0.12	47,47,47,47	0
54	MG	2A	3709	1/1	0.96	0.10	55,55,55,55	0
54	MG	2A	3710	1/1	0.96	0.09	61,61,61,61	0
54	MG	2A	3517	1/1	0.96	0.23	68,68,68,68	0
54	MG	2A	3165	1/1	0.96	0.15	74,74,74,74	0
54	MG	1a	1748	1/1	0.96	0.20	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3571	1/1	0.96	0.12	51,51,51,51	0
54	MG	2a	3126	1/1	0.96	0.14	63,63,63,63	0
54	MG	1A	3498	1/1	0.96	0.06	71,71,71,71	0
54	MG	1A	3057	1/1	0.96	0.32	50,50,50,50	0
54	MG	1a	1628	1/1	0.96	0.08	72,72,72,72	0
54	MG	1A	3440	1/1	0.96	0.22	33,33,33,33	0
54	MG	1A	3939	1/1	0.96	0.21	36,36,36,36	0
54	MG	1A	3441	1/1	0.96	0.21	27,27,27,27	0
54	MG	1F	302	1/1	0.96	0.15	39,39,39,39	0
54	MG	1a	1633	1/1	0.96	0.12	50,50,50,50	0
54	MG	1A	3651	1/1	0.96	0.13	59,59,59,59	0
54	MG	2A	3356	1/1	0.96	0.11	66,66,66,66	0
54	MG	1A	3652	1/1	0.96	0.19	49,49,49,49	0
54	MG	2A	3360	1/1	0.96	0.17	42,42,42,42	0
54	MG	1A	3576	1/1	0.96	0.16	63,63,63,63	0
54	MG	2A	3538	1/1	0.96	0.14	48,48,48,48	0
54	MG	2A	3006	1/1	0.96	0.16	50,50,50,50	0
54	MG	1a	1761	1/1	0.96	0.16	62,62,62,62	0
54	MG	2a	3144	1/1	0.96	0.17	59,59,59,59	0
54	MG	2B	206	1/1	0.96	0.17	84,84,84,84	0
54	MG	1A	3838	1/1	0.96	0.11	50,50,50,50	0
54	MG	1A	3839	1/1	0.96	0.18	49,49,49,49	0
54	MG	1A	3380	1/1	0.96	0.19	41,41,41,41	0
54	MG	1a	1765	1/1	0.96	0.12	75,75,75,75	0
54	MG	1A	3504	1/1	0.96	0.11	60,60,60,60	0
54	MG	1A	3268	1/1	0.96	0.21	36,36,36,36	0
54	MG	1A	3133	1/1	0.96	0.18	46,46,46,46	0
54	MG	1A	3058	1/1	0.96	0.12	36,36,36,36	0
54	MG	2A	3023	1/1	0.96	0.24	63,63,63,63	0
54	MG	1a	1644	1/1	0.96	0.21	63,63,63,63	0
54	MG	1A	3661	1/1	0.96	0.06	64,64,64,64	0
54	MG	2A	3196	1/1	0.96	0.27	50,50,50,50	0
54	MG	2A	3027	1/1	0.96	0.11	33,33,33,33	0
54	MG	1A	3847	1/1	0.96	0.22	31,31,31,31	0
54	MG	1A	3448	1/1	0.96	0.13	56,56,56,56	0
54	MG	2a	3164	1/1	0.96	0.19	62,62,62,62	0
54	MG	2a	3165	1/1	0.96	0.08	70,70,70,70	0
54	MG	2D	307	1/1	0.96	0.46	48,48,48,48	0
54	MG	1A	3322	1/1	0.96	0.20	28,28,28,28	0
54	MG	1A	3013	1/1	0.96	0.13	24,24,24,24	0
54	MG	1A	3666	1/1	0.96	0.04	61,61,61,61	0
54	MG	1a	1777	1/1	0.96	0.18	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3667	1/1	0.96	0.10	43,43,43,43	0
54	MG	1A	3328	1/1	0.96	0.27	41,41,41,41	0
54	MG	1A	3452	1/1	0.96	0.17	57,57,57,57	0
54	MG	2A	3568	1/1	0.96	0.14	33,33,33,33	0
54	MG	1P	201	1/1	0.96	0.29	38,38,38,38	0
54	MG	1A	3329	1/1	0.96	0.23	33,33,33,33	0
54	MG	1A	3762	1/1	0.96	0.10	36,36,36,36	0
54	MG	2a	3179	1/1	0.96	0.09	82,82,82,82	0
54	MG	2F	303	1/1	0.96	0.26	59,59,59,59	0
54	MG	2a	3181	1/1	0.96	0.11	57,57,57,57	0
54	MG	1A	3859	1/1	0.96	0.15	41,41,41,41	0
54	MG	1A	3275	1/1	0.96	0.26	43,43,43,43	0
54	MG	1A	3224	1/1	0.96	0.22	53,53,53,53	0
54	MG	1A	3038	1/1	0.96	0.21	44,44,44,44	0
54	MG	2A	3397	1/1	0.96	0.16	50,50,50,50	0
54	MG	1A	3180	1/1	0.96	0.19	46,46,46,46	0
54	MG	1A	3396	1/1	0.96	0.12	61,61,61,61	0
54	MG	2t	201	1/1	0.96	0.08	49,49,49,49	0
55	A1AE1	1A	3996	76/76	0.96	0.21	21,36,46,56	0
54	MG	1A	3338	1/1	0.96	0.24	30,30,30,30	0
54	MG	1A	3280	1/1	0.96	0.12	51,51,51,51	0
54	MG	2R	202	1/1	0.96	0.10	71,71,71,71	0
54	MG	1A	3106	1/1	0.96	0.27	45,45,45,45	0
54	MG	2T	202	1/1	0.96	0.12	69,69,69,69	0
54	MG	1a	1794	1/1	0.96	0.09	59,59,59,59	0
54	MG	2A	3584	1/1	0.96	0.13	43,43,43,43	0
54	MG	2A	3223	1/1	0.96	0.23	24,24,24,24	0
54	MG	1A	3681	1/1	0.96	0.24	44,44,44,44	0
54	MG	1A	3682	1/1	0.96	0.26	56,56,56,56	0
54	MG	1a	1797	1/1	0.96	0.07	64,64,64,64	0
54	MG	1A	3433	1/1	0.97	0.17	28,28,28,28	0
54	MG	1A	3029	1/1	0.97	0.13	43,43,43,43	0
54	MG	1A	3097	1/1	0.97	0.23	40,40,40,40	0
54	MG	2A	3059	1/1	0.97	0.62	48,48,48,48	0
54	MG	1A	3138	1/1	0.97	0.18	49,49,49,49	0
54	MG	1A	3115	1/1	0.97	0.20	54,54,54,54	0
54	MG	1A	3858	1/1	0.97	0.18	54,54,54,54	0
54	MG	2A	3064	1/1	0.97	0.45	52,52,52,52	0
54	MG	2A	3514	1/1	0.97	0.19	37,37,37,37	0
54	MG	2A	3364	1/1	0.97	0.08	67,67,67,67	0
54	MG	2A	3065	1/1	0.97	0.21	45,45,45,45	0
54	MG	1a	1713	1/1	0.97	0.19	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3068	1/1	0.97	0.17	57,57,57,57	0
54	MG	1A	3334	1/1	0.97	0.24	45,45,45,45	0
54	MG	1A	3335	1/1	0.97	0.13	42,42,42,42	0
54	MG	1A	3203	1/1	0.97	0.26	41,41,41,41	0
54	MG	1A	3204	1/1	0.97	0.16	40,40,40,40	0
54	MG	1A	3780	1/1	0.97	0.23	44,44,44,44	0
54	MG	1A	3205	1/1	0.97	0.12	48,48,48,48	0
54	MG	1a	1612	1/1	0.97	0.21	31,31,31,31	0
54	MG	2A	3528	1/1	0.97	0.09	58,58,58,58	0
54	MG	1F	303	1/1	0.97	0.17	37,37,37,37	0
54	MG	2A	3218	1/1	0.97	0.10	68,68,68,68	0
54	MG	1A	3699	1/1	0.97	0.15	38,38,38,38	0
54	MG	1A	3172	1/1	0.97	0.13	49,49,49,49	0
54	MG	1F	307	1/1	0.97	0.18	29,29,29,29	0
54	MG	1A	3702	1/1	0.97	0.16	37,37,37,37	0
54	MG	1A	3499	1/1	0.97	0.25	27,27,27,27	0
54	MG	1A	3961	1/1	0.97	0.24	46,46,46,46	0
54	MG	1a	1621	1/1	0.97	0.08	53,53,53,53	0
54	MG	1A	3786	1/1	0.97	0.06	37,37,37,37	0
54	MG	2A	3699	1/1	0.97	0.09	62,62,62,62	0
54	MG	2A	3540	1/1	0.97	0.11	44,44,44,44	0
54	MG	1A	3063	1/1	0.97	0.18	42,42,42,42	0
54	MG	2a	3071	1/1	0.97	0.17	60,60,60,60	0
54	MG	1A	3564	1/1	0.97	0.25	32,32,32,32	0
54	MG	1a	1844	1/1	0.97	0.12	60,60,60,60	0
54	MG	2A	3092	1/1	0.97	0.16	33,33,33,33	0
54	MG	1A	3208	1/1	0.97	0.27	42,42,42,42	0
54	MG	1A	3084	1/1	0.97	0.13	40,40,40,40	0
54	MG	1a	1737	1/1	0.97	0.14	67,67,67,67	0
54	MG	1A	3709	1/1	0.97	0.13	35,35,35,35	0
54	MG	1A	3064	1/1	0.97	0.30	43,43,43,43	0
54	MG	1A	3877	1/1	0.97	0.18	26,26,26,26	0
54	MG	1G	204	1/1	0.97	0.15	58,58,58,58	0
54	MG	1A	3119	1/1	0.97	0.13	58,58,58,58	0
54	MG	2A	3101	1/1	0.97	0.10	65,65,65,65	0
54	MG	1A	3794	1/1	0.97	0.18	34,34,34,34	0
54	MG	2A	3401	1/1	0.97	0.19	60,60,60,60	0
54	MG	1A	3636	1/1	0.97	0.14	54,54,54,54	0
54	MG	1A	3713	1/1	0.97	0.06	55,55,55,55	0
54	MG	1A	3505	1/1	0.97	0.20	28,28,28,28	0
54	MG	2a	3089	1/1	0.97	0.14	58,58,58,58	0
54	MG	1a	1857	1/1	0.97	0.12	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3247	1/1	0.97	0.20	56,56,56,56	0
54	MG	1A	3639	1/1	0.97	0.17	39,39,39,39	0
54	MG	2a	3093	1/1	0.97	0.17	59,59,59,59	0
54	MG	1A	3799	1/1	0.97	0.17	28,28,28,28	0
54	MG	2a	3095	1/1	0.97	0.27	63,63,63,63	0
54	MG	2A	3724	1/1	0.97	0.19	68,68,68,68	0
54	MG	1A	3346	1/1	0.97	0.16	36,36,36,36	0
54	MG	2A	3111	1/1	0.97	0.23	46,46,46,46	0
54	MG	2A	3112	1/1	0.97	0.63	50,50,50,50	0
54	MG	1A	3717	1/1	0.97	0.17	23,23,23,23	0
54	MG	1A	3641	1/1	0.97	0.16	28,28,28,28	0
54	MG	1Q	201	1/1	0.97	0.30	52,52,52,52	0
54	MG	2A	3116	1/1	0.97	0.20	63,63,63,63	0
54	MG	1a	1864	1/1	0.97	0.05	69,69,69,69	0
54	MG	1A	3101	1/1	0.97	0.10	35,35,35,35	0
54	MG	1A	3890	1/1	0.97	0.04	69,69,69,69	0
54	MG	1A	3720	1/1	0.97	0.16	43,43,43,43	0
54	MG	1A	3181	1/1	0.97	0.15	45,45,45,45	0
54	MG	1A	3075	1/1	0.97	0.28	46,46,46,46	0
54	MG	1A	3510	1/1	0.97	0.10	41,41,41,41	0
54	MG	1A	3219	1/1	0.97	0.18	38,38,38,38	0
54	MG	1e	201	1/1	0.97	0.41	62,62,62,62	0
54	MG	1A	3402	1/1	0.97	0.18	31,31,31,31	0
54	MG	1A	3810	1/1	0.97	0.19	49,49,49,49	0
54	MG	1A	3577	1/1	0.97	0.18	25,25,25,25	0
54	MG	1A	3352	1/1	0.97	0.11	19,19,19,19	0
54	MG	1A	3263	1/1	0.97	0.46	49,49,49,49	0
54	MG	2D	304	1/1	0.97	0.43	44,44,44,44	0
54	MG	1T	206	1/1	0.97	0.14	60,60,60,60	0
54	MG	1A	3354	1/1	0.97	0.28	28,28,28,28	0
54	MG	1U	202	1/1	0.97	0.20	42,42,42,42	0
54	MG	2A	3277	1/1	0.97	0.08	67,67,67,67	0
54	MG	1a	1657	1/1	0.97	0.24	57,57,57,57	0
54	MG	1A	3406	1/1	0.97	0.15	30,30,30,30	0
54	MG	1U	205	1/1	0.97	0.17	40,40,40,40	0
54	MG	2A	3282	1/1	0.97	0.14	66,66,66,66	0
54	MG	2A	3599	1/1	0.97	0.17	24,24,24,24	0
54	MG	1A	3356	1/1	0.97	0.23	72,72,72,72	0
54	MG	2E	305	1/1	0.97	0.14	42,42,42,42	0
54	MG	1A	3104	1/1	0.97	0.22	33,33,33,33	0
54	MG	1A	3049	1/1	0.97	0.21	34,34,34,34	0
54	MG	1A	3223	1/1	0.97	0.12	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3290	1/1	0.97	0.24	58,58,58,58	0
54	MG	2A	3445	1/1	0.97	0.09	76,76,76,76	0
54	MG	2A	3144	1/1	0.97	0.30	44,44,44,44	0
54	MG	2A	3447	1/1	0.97	0.17	36,36,36,36	0
54	MG	1A	3465	1/1	0.97	0.22	50,50,50,50	0
54	MG	1A	3006	1/1	0.97	0.10	30,30,30,30	0
54	MG	1A	3225	1/1	0.97	0.24	36,36,36,36	0
54	MG	1a	1778	1/1	0.97	0.14	64,64,64,64	0
54	MG	1A	3362	1/1	0.97	0.17	51,51,51,51	0
54	MG	1A	3590	1/1	0.97	0.26	35,35,35,35	0
54	MG	1A	3664	1/1	0.97	0.10	29,29,29,29	0
54	MG	2A	3004	1/1	0.97	0.13	39,39,39,39	0
54	MG	2A	3301	1/1	0.97	0.09	37,37,37,37	0
54	MG	2a	3149	1/1	0.97	0.07	56,56,56,56	0
54	MG	1A	3591	1/1	0.97	0.08	71,71,71,71	0
54	MG	1A	3526	1/1	0.97	0.16	30,30,30,30	0
54	MG	1A	3127	1/1	0.97	0.22	40,40,40,40	0
54	MG	1A	3529	1/1	0.97	0.12	40,40,40,40	0
54	MG	1A	3530	1/1	0.97	0.12	39,39,39,39	0
54	MG	1A	3187	1/1	0.97	0.15	41,41,41,41	0
54	MG	10	103	1/1	0.97	0.13	49,49,49,49	0
54	MG	1A	3055	1/1	0.97	0.09	49,49,49,49	0
54	MG	10	105	1/1	0.97	0.14	61,61,61,61	0
54	MG	2a	3159	1/1	0.97	0.13	67,67,67,67	0
54	MG	1A	3834	1/1	0.97	0.21	32,32,32,32	0
54	MG	1A	3274	1/1	0.97	0.14	38,38,38,38	0
54	MG	1A	3009	1/1	0.97	0.12	35,35,35,35	0
54	MG	1A	3422	1/1	0.97	0.15	42,42,42,42	0
54	MG	1B	220	1/1	0.97	0.18	69,69,69,69	0
54	MG	2A	3026	1/1	0.97	0.23	56,56,56,56	0
54	MG	1A	3928	1/1	0.97	0.10	51,51,51,51	0
54	MG	2A	3028	1/1	0.97	0.13	42,42,42,42	0
54	MG	2A	3170	1/1	0.97	0.18	69,69,69,69	0
54	MG	1B	222	1/1	0.97	0.23	41,41,41,41	0
54	MG	1B	223	1/1	0.97	0.12	43,43,43,43	0
54	MG	2A	3478	1/1	0.97	0.05	69,69,69,69	0
54	MG	2A	3479	1/1	0.97	0.14	33,33,33,33	0
54	MG	1A	3159	1/1	0.97	0.26	36,36,36,36	0
54	MG	1A	3677	1/1	0.97	0.18	43,43,43,43	0
54	MG	13	101	1/1	0.97	0.14	41,41,41,41	0
54	MG	2A	3035	1/1	0.97	0.13	50,50,50,50	0
54	MG	2a	3010	1/1	0.97	0.10	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3538	1/1	0.97	0.14	36,36,36,36	0
54	MG	13	103	1/1	0.97	0.10	45,45,45,45	0
54	MG	2A	3329	1/1	0.97	0.20	29,29,29,29	0
54	MG	2A	3647	1/1	0.97	0.06	72,72,72,72	0
54	MG	2A	3039	1/1	0.97	0.18	53,53,53,53	0
54	MG	2A	3182	1/1	0.97	0.40	51,51,51,51	0
54	MG	15	102	1/1	0.97	0.12	45,45,45,45	0
54	MG	1A	3192	1/1	0.97	0.29	45,45,45,45	0
54	MG	1A	3071	1/1	0.97	0.17	37,37,37,37	0
54	MG	1A	3321	1/1	0.97	0.16	29,29,29,29	0
54	MG	2A	3044	1/1	0.97	0.12	49,49,49,49	0
54	MG	2A	3045	1/1	0.97	0.11	41,41,41,41	0
54	MG	1A	3372	1/1	0.97	0.20	61,61,61,61	0
54	MG	2A	3343	1/1	0.97	0.17	71,71,71,71	0
54	MG	2a	3025	1/1	0.97	0.14	56,56,56,56	0
54	MG	1A	3134	1/1	0.97	0.14	37,37,37,37	0
54	MG	1A	3323	1/1	0.97	0.31	54,54,54,54	0
54	MG	1A	3135	1/1	0.97	0.11	36,36,36,36	0
54	MG	1D	304	1/1	0.97	0.16	41,41,41,41	0
54	MG	1A	3484	1/1	0.97	0.11	52,52,52,52	0
54	MG	1D	308	1/1	0.97	0.22	37,37,37,37	0
58	ZN	1Y	202	1/1	0.97	0.21	62,62,62,62	0
58	ZN	14	501	1/1	0.97	0.07	110,110,110,110	0
54	MG	1A	3547	1/1	0.97	0.19	39,39,39,39	0
54	MG	1A	3327	1/1	0.97	0.19	14,14,14,14	0
58	ZN	25	102	1/1	0.97	0.18	69,69,69,69	0
58	ZN	29	501	1/1	0.97	0.11	71,71,71,71	0
58	ZN	2n	501	1/1	0.97	0.08	90,90,90,90	0
54	MG	1A	3736	1/1	0.98	0.16	43,43,43,43	0
54	MG	2a	3038	1/1	0.98	0.12	74,74,74,74	0
54	MG	2A	3361	1/1	0.98	0.18	42,42,42,42	0
54	MG	1A	3408	1/1	0.98	0.25	29,29,29,29	0
54	MG	1A	3260	1/1	0.98	0.22	33,33,33,33	0
54	MG	1A	3216	1/1	0.98	0.20	37,37,37,37	0
54	MG	1A	3740	1/1	0.98	0.15	34,34,34,34	0
54	MG	1R	201	1/1	0.98	0.30	51,51,51,51	0
54	MG	1A	3528	1/1	0.98	0.11	23,23,23,23	0
54	MG	1A	3594	1/1	0.98	0.13	36,36,36,36	0
54	MG	1A	3107	1/1	0.98	0.34	43,43,43,43	0
54	MG	2A	3676	1/1	0.98	0.22	47,47,47,47	0
54	MG	1A	3309	1/1	0.98	0.14	32,32,32,32	0
54	MG	2A	3090	1/1	0.98	0.12	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3126	1/1	0.98	0.26	32,32,32,32	0
54	MG	1A	3532	1/1	0.98	0.15	38,38,38,38	0
54	MG	1A	3907	1/1	0.98	0.24	30,30,30,30	0
54	MG	1A	3908	1/1	0.98	0.13	38,38,38,38	0
54	MG	2A	3524	1/1	0.98	0.15	24,24,24,24	0
54	MG	2A	3525	1/1	0.98	0.10	61,61,61,61	0
54	MG	2A	3227	1/1	0.98	0.53	50,50,50,50	0
54	MG	1A	3070	1/1	0.98	0.31	50,50,50,50	0
54	MG	1A	3415	1/1	0.98	0.22	24,24,24,24	0
54	MG	1A	3045	1/1	0.98	0.17	55,55,55,55	0
54	MG	1A	3222	1/1	0.98	0.22	38,38,38,38	0
54	MG	1A	3418	1/1	0.98	0.17	17,17,17,17	0
54	MG	2A	3383	1/1	0.98	0.20	50,50,50,50	0
54	MG	2A	3533	1/1	0.98	0.17	37,37,37,37	0
54	MG	1U	204	1/1	0.98	0.12	41,41,41,41	0
54	MG	1d	301	1/1	0.98	0.11	69,69,69,69	0
54	MG	1A	3914	1/1	0.98	0.12	31,31,31,31	0
54	MG	2A	3103	1/1	0.98	0.08	49,49,49,49	0
54	MG	1A	3674	1/1	0.98	0.35	52,52,52,52	0
54	MG	1A	3111	1/1	0.98	0.26	24,24,24,24	0
54	MG	1A	3917	1/1	0.98	0.10	52,52,52,52	0
54	MG	2A	3700	1/1	0.98	0.21	61,61,61,61	0
54	MG	1A	3156	1/1	0.98	0.10	43,43,43,43	0
54	MG	1A	3316	1/1	0.98	0.22	41,41,41,41	0
54	MG	1A	3131	1/1	0.98	0.13	35,35,35,35	0
54	MG	1A	3095	1/1	0.98	0.28	36,36,36,36	0
54	MG	1a	1661	1/1	0.98	0.38	65,65,65,65	0
54	MG	2A	3546	1/1	0.98	0.21	49,49,49,49	0
54	MG	1A	3037	1/1	0.98	0.18	35,35,35,35	0
54	MG	1A	3482	1/1	0.98	0.18	27,27,27,27	0
54	MG	1A	3162	1/1	0.98	0.16	33,33,33,33	0
54	MG	2A	3248	1/1	0.98	0.15	44,44,44,44	0
54	MG	1A	3025	1/1	0.98	0.25	38,38,38,38	0
54	MG	1A	3841	1/1	0.98	0.22	28,28,28,28	0
54	MG	1A	3613	1/1	0.98	0.17	33,33,33,33	0
54	MG	1A	3032	1/1	0.98	0.11	39,39,39,39	0
54	MG	2A	3119	1/1	0.98	0.16	36,36,36,36	0
54	MG	1n	102	1/1	0.98	0.17	70,70,70,70	0
54	MG	1A	3277	1/1	0.98	0.17	34,34,34,34	0
54	MG	2A	3558	1/1	0.98	0.08	41,41,41,41	0
54	MG	1A	3196	1/1	0.98	0.46	44,44,44,44	0
54	MG	1A	3617	1/1	0.98	0.06	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3932	1/1	0.98	0.11	45,45,45,45	0
54	MG	2A	3562	1/1	0.98	0.14	42,42,42,42	0
54	MG	1A	3488	1/1	0.98	0.17	46,46,46,46	0
54	MG	1A	3769	1/1	0.98	0.17	58,58,58,58	0
54	MG	1A	3007	1/1	0.98	0.16	35,35,35,35	0
54	MG	2A	3566	1/1	0.98	0.16	53,53,53,53	0
54	MG	1A	3086	1/1	0.98	0.26	40,40,40,40	0
54	MG	1A	3199	1/1	0.98	0.09	27,27,27,27	0
54	MG	2A	3130	1/1	0.98	0.26	43,43,43,43	0
54	MG	1A	3330	1/1	0.98	0.20	33,33,33,33	0
54	MG	1A	3555	1/1	0.98	0.20	22,22,22,22	0
54	MG	1D	302	1/1	0.98	0.16	43,43,43,43	0
54	MG	2A	3573	1/1	0.98	0.17	66,66,66,66	0
54	MG	1A	3331	1/1	0.98	0.15	48,48,48,48	0
54	MG	1A	3200	1/1	0.98	0.24	32,32,32,32	0
54	MG	2A	3007	1/1	0.98	0.11	39,39,39,39	0
54	MG	1D	305	1/1	0.98	0.18	46,46,46,46	0
54	MG	1A	3495	1/1	0.98	0.22	28,28,28,28	0
54	MG	1A	3857	1/1	0.98	0.11	37,37,37,37	0
54	MG	1A	3087	1/1	0.98	0.28	41,41,41,41	0
54	MG	2A	3013	1/1	0.98	0.17	22,22,22,22	0
54	MG	2A	3278	1/1	0.98	0.15	41,41,41,41	0
54	MG	2A	3142	1/1	0.98	0.16	48,48,48,48	0
54	MG	15	101	1/1	0.98	0.14	32,32,32,32	0
54	MG	2D	302	1/1	0.98	0.14	55,55,55,55	0
54	MG	2A	3585	1/1	0.98	0.16	44,44,44,44	0
54	MG	2A	3016	1/1	0.98	0.08	77,77,77,77	0
54	MG	1A	3238	1/1	0.98	0.09	76,76,76,76	0
54	MG	1A	3700	1/1	0.98	0.10	49,49,49,49	0
54	MG	2a	3123	1/1	0.98	0.10	56,56,56,56	0
54	MG	2A	3019	1/1	0.98	0.58	50,50,50,50	0
54	MG	2A	3590	1/1	0.98	0.18	63,63,63,63	0
54	MG	2A	3020	1/1	0.98	0.16	44,44,44,44	0
54	MG	1A	3948	1/1	0.98	0.18	52,52,52,52	0
54	MG	1A	3861	1/1	0.98	0.17	49,49,49,49	0
54	MG	1D	315	1/1	0.98	0.15	60,60,60,60	0
54	MG	2E	301	1/1	0.98	0.45	44,44,44,44	0
54	MG	2E	302	1/1	0.98	0.12	54,54,54,54	0
54	MG	1A	3383	1/1	0.98	0.21	25,25,25,25	0
54	MG	1A	3630	1/1	0.98	0.14	32,32,32,32	0
54	MG	1E	302	1/1	0.98	0.19	39,39,39,39	0
54	MG	17	101	1/1	0.98	0.18	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3443	1/1	0.98	0.13	44,44,44,44	0
54	MG	1E	303	1/1	0.98	0.37	45,45,45,45	0
54	MG	2A	3029	1/1	0.98	0.16	24,24,24,24	0
54	MG	17	103	1/1	0.98	0.16	39,39,39,39	0
54	MG	1A	3239	1/1	0.98	0.26	47,47,47,47	0
54	MG	2a	3141	1/1	0.98	0.21	71,71,71,71	0
54	MG	1A	3286	1/1	0.98	0.27	47,47,47,47	0
54	MG	1A	3141	1/1	0.98	0.21	45,45,45,45	0
54	MG	1A	3706	1/1	0.98	0.20	28,28,28,28	0
54	MG	19	101	1/1	0.98	0.15	59,59,59,59	0
54	MG	1A	3443	1/1	0.98	0.12	66,66,66,66	0
54	MG	2A	3037	1/1	0.98	0.15	40,40,40,40	0
54	MG	2a	3148	1/1	0.98	0.11	65,65,65,65	0
54	MG	2A	3307	1/1	0.98	0.17	30,30,30,30	0
54	MG	1A	3028	1/1	0.98	0.21	36,36,36,36	0
54	MG	1E	311	1/1	0.98	0.16	64,64,64,64	0
54	MG	1F	301	1/1	0.98	0.15	33,33,33,33	0
54	MG	1A	3242	1/1	0.98	0.26	39,39,39,39	0
54	MG	1A	3173	1/1	0.98	0.35	42,42,42,42	0
54	MG	2A	3171	1/1	0.98	0.13	56,56,56,56	0
54	MG	1A	3638	1/1	0.98	0.36	49,49,49,49	0
54	MG	1A	3447	1/1	0.98	0.12	60,60,60,60	0
54	MG	2A	3463	1/1	0.98	0.12	56,56,56,56	0
54	MG	2A	3620	1/1	0.98	0.10	70,70,70,70	0
54	MG	1A	3341	1/1	0.98	0.17	31,31,31,31	0
54	MG	1A	3392	1/1	0.98	0.17	27,27,27,27	0
54	MG	1A	3103	1/1	0.98	0.19	38,38,38,38	0
54	MG	1a	1822	1/1	0.98	0.08	68,68,68,68	0
54	MG	2A	3178	1/1	0.98	0.13	54,54,54,54	0
54	MG	1a	1716	1/1	0.98	0.16	58,58,58,58	0
54	MG	1A	3394	1/1	0.98	0.18	24,24,24,24	0
54	MG	1A	3144	1/1	0.98	0.16	37,37,37,37	0
54	MG	1A	3295	1/1	0.98	0.17	52,52,52,52	0
54	MG	1A	3145	1/1	0.98	0.27	36,36,36,36	0
54	MG	1a	1828	1/1	0.98	0.08	48,48,48,48	0
54	MG	1A	3881	1/1	0.98	0.15	20,20,20,20	0
54	MG	1A	3177	1/1	0.98	0.30	55,55,55,55	0
54	MG	2A	3057	1/1	0.98	0.23	43,43,43,43	0
54	MG	1A	3209	1/1	0.98	0.25	36,36,36,36	0
54	MG	1a	1724	1/1	0.98	0.12	49,49,49,49	0
54	MG	1A	3400	1/1	0.98	0.12	44,44,44,44	0
54	MG	2A	3481	1/1	0.98	0.13	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3061	1/1	0.98	0.15	31,31,31,31	0
54	MG	2A	3334	1/1	0.98	0.21	35,35,35,35	0
54	MG	2A	3335	1/1	0.98	0.25	53,53,53,53	0
54	MG	1A	3517	1/1	0.98	0.14	25,25,25,25	0
54	MG	1G	203	1/1	0.98	0.14	50,50,50,50	0
54	MG	2A	3338	1/1	0.98	0.15	37,37,37,37	0
54	MG	1A	3178	1/1	0.98	0.21	66,66,66,66	0
54	MG	1A	3023	1/1	0.98	0.14	38,38,38,38	0
54	MG	2A	3341	1/1	0.98	0.15	41,41,41,41	0
54	MG	1A	3653	1/1	0.98	0.17	47,47,47,47	0
54	MG	2A	3067	1/1	0.98	0.30	52,52,52,52	0
54	MG	2A	3198	1/1	0.98	0.24	43,43,43,43	0
54	MG	2A	3651	1/1	0.98	0.07	48,48,48,48	0
54	MG	1A	3078	1/1	0.98	0.29	34,34,34,34	0
54	MG	2A	3069	1/1	0.98	0.09	53,53,53,53	0
54	MG	1A	3017	1/1	0.98	0.22	33,33,33,33	0
54	MG	1a	1733	1/1	0.98	0.08	68,68,68,68	0
54	MG	2A	3072	1/1	0.98	0.35	51,51,51,51	0
54	MG	1A	3730	1/1	0.98	0.19	55,55,55,55	0
54	MG	2A	3074	1/1	0.98	0.10	40,40,40,40	0
54	MG	1N	204	1/1	0.98	0.11	53,53,53,53	0
54	MG	1A	3656	1/1	0.98	0.25	40,40,40,40	0
54	MG	1A	3304	1/1	0.98	0.35	65,65,65,65	0
58	ZN	1n	104	1/1	0.98	0.14	65,65,65,65	0
54	MG	1A	3124	1/1	0.98	0.23	41,41,41,41	0
54	MG	2A	3357	1/1	0.98	0.14	43,43,43,43	0
54	MG	2A	3358	1/1	0.98	0.09	72,72,72,72	0
54	MG	2a	3035	1/1	0.98	0.12	77,77,77,77	0
54	MG	1A	3355	1/1	0.98	0.17	18,18,18,18	0
59	SF4	1d	306	8/8	0.98	0.15	64,69,73,76	0
59	SF4	2d	501	8/8	0.98	0.14	68,78,83,88	0
54	MG	2A	3292	1/1	0.99	0.20	45,45,45,45	0
54	MG	1A	3003	1/1	0.99	0.14	27,27,27,27	0
54	MG	1A	3110	1/1	0.99	0.24	43,43,43,43	0
54	MG	1A	3217	1/1	0.99	0.10	30,30,30,30	0
54	MG	1A	3089	1/1	0.99	0.19	19,19,19,19	0
54	MG	1A	3298	1/1	0.99	0.18	33,33,33,33	0
54	MG	1A	3963	1/1	0.99	0.20	19,19,19,19	0
54	MG	1A	3164	1/1	0.99	0.14	32,32,32,32	0
54	MG	2D	301	1/1	0.99	0.26	41,41,41,41	0
54	MG	1F	304	1/1	0.99	0.17	38,38,38,38	0
54	MG	1A	3165	1/1	0.99	0.18	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3427	1/1	0.99	0.14	36,36,36,36	0
54	MG	1A	3021	1/1	0.99	0.14	40,40,40,40	0
54	MG	1A	3593	1/1	0.99	0.17	38,38,38,38	0
54	MG	1F	308	1/1	0.99	0.22	38,38,38,38	0
54	MG	1A	3243	1/1	0.99	0.15	41,41,41,41	0
54	MG	1a	1867	1/1	0.99	0.08	73,73,73,73	0
54	MG	1A	3271	1/1	0.99	0.19	24,24,24,24	0
54	MG	1A	3272	1/1	0.99	0.20	19,19,19,19	0
54	MG	2A	3371	1/1	0.99	0.08	68,68,68,68	0
54	MG	1A	3167	1/1	0.99	0.20	38,38,38,38	0
54	MG	1A	3245	1/1	0.99	0.09	47,47,47,47	0
54	MG	1A	3246	1/1	0.99	0.38	44,44,44,44	0
54	MG	1a	1613	1/1	0.99	0.08	66,66,66,66	0
54	MG	1A	3247	1/1	0.99	0.22	33,33,33,33	0
54	MG	1A	3248	1/1	0.99	0.21	31,31,31,31	0
54	MG	2a	3168	1/1	0.99	0.23	63,63,63,63	0
54	MG	1A	3563	1/1	0.99	0.26	26,26,26,26	0
54	MG	1A	3129	1/1	0.99	0.20	46,46,46,46	0
54	MG	1A	3933	1/1	0.99	0.14	31,31,31,31	0
54	MG	1A	3140	1/1	0.99	0.28	33,33,33,33	0
54	MG	2F	304	1/1	0.99	0.34	48,48,48,48	0
54	MG	1A	3066	1/1	0.99	0.15	34,34,34,34	0
54	MG	1A	3019	1/1	0.99	0.19	31,31,31,31	0
54	MG	1A	3189	1/1	0.99	0.35	43,43,43,43	0
54	MG	1A	3766	1/1	0.99	0.26	35,35,35,35	0
54	MG	2A	3262	1/1	0.99	0.59	45,45,45,45	0
54	MG	1A	3349	1/1	0.99	0.18	24,24,24,24	0
54	MG	2a	3045	1/1	0.99	0.13	72,72,72,72	0
54	MG	1A	3132	1/1	0.99	0.24	23,23,23,23	0
54	MG	1A	3727	1/1	0.99	0.24	31,31,31,31	0
54	MG	1A	3042	1/1	0.99	0.20	23,23,23,23	0
54	MG	1D	306	1/1	0.99	0.21	20,20,20,20	0
54	MG	2A	3268	1/1	0.99	0.17	38,38,38,38	0
54	MG	1A	3813	1/1	0.99	0.18	24,24,24,24	0
54	MG	1A	3157	1/1	0.99	0.35	46,46,46,46	0
54	MG	1A	3257	1/1	0.99	0.27	47,47,47,47	0
54	MG	1D	310	1/1	0.99	0.17	33,33,33,33	0
54	MG	1A	3731	1/1	0.99	0.14	52,52,52,52	0
54	MG	1A	3389	1/1	0.99	0.24	27,27,27,27	0
54	MG	1A	3026	1/1	0.99	0.39	39,39,39,39	0
54	MG	1A	3146	1/1	0.99	0.42	46,46,46,46	0
54	MG	1A	3428	1/1	0.99	0.19	15,15,15,15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3221	1/1	0.99	0.25	41,41,41,41	0
54	MG	1A	3160	1/1	0.99	0.15	30,30,30,30	0
54	MG	1A	3290	1/1	0.99	0.21	24,24,24,24	0
54	MG	1A	3214	1/1	0.99	0.24	35,35,35,35	0
54	MG	1A	3324	1/1	0.99	0.11	24,24,24,24	0
54	MG	1a	1693	1/1	0.99	0.11	63,63,63,63	0
54	MG	1E	304	1/1	0.99	0.21	36,36,36,36	0
58	ZN	15	110	1/1	0.99	0.18	59,59,59,59	0
58	ZN	16	501	1/1	0.99	0.25	45,45,45,45	0
58	ZN	19	103	1/1	0.99	0.20	46,46,46,46	0
54	MG	2A	3285	1/1	0.99	0.19	22,22,22,22	0
54	MG	2A	3286	1/1	0.99	0.17	65,65,65,65	0
54	MG	1A	3325	1/1	0.99	0.19	30,30,30,30	0
54	MG	2A	3011	1/1	0.99	0.19	35,35,35,35	0
58	ZN	26	501	1/1	0.99	0.17	61,61,61,61	0
54	MG	2A	3289	1/1	0.99	0.11	51,51,51,51	0
54	MG	1A	3292	1/1	0.99	0.13	49,49,49,49	0
54	MG	2A	3352	1/1	0.99	0.23	33,33,33,33	0
54	MG	1A	3235	1/1	0.99	0.32	30,30,30,30	0
54	MG	2A	3015	1/1	1.00	0.21	34,34,34,34	0

6.5 Other polymers (i)

There are no such residues in this entry.